

POSTDOCTORAL FELLOWSHIP OPPORTUNITY



The University of the Fraser Valley's Food and Agriculture Institute received \$2.5 million in funding for a four-year research project entitled '**The Social Implications of Agri-Genomics: Ensuring a Just Transition to Climate- Resilient Agricultural and Food Systems in Canada**'. Funded by Genome Canada's Climate Action Genomics Initiative with co-funding from Genome BC, the Mitacs Accelerate program, and industry partner i-Open Technologies.

Position Details:

Postdoctoral Fellow, Researcher

Paid Internship, University of the Fraser Valley

Contract Term: 15 months

Salary: \$65,000/year plus benefits

Anticipated Start Date: September 2024

Preference to applications submitted by: **August 31, 2024**

Qualified candidates will have:

- A PhD in Social Science, Geography, Environmental Science, or a related field; and
- Indigenous cultural sensitivity.

Experience or interest in:

- Geographical Information Science (GIS) software
- GEL³S
- Agri-genomic Technologies
- Resilient and Climate-Smart Food Systems
- Just Transitions

To apply, please send the following (2) documents to charmaine.white@ufv.ca:

(1) Cover letter outlining research interests and qualifications; and (2) Curriculum Vitae.

To learn more about this project please contact:
Dr. Stefania Pizzirani, stefania.pizzirani@ufv.ca

Description of Proposed Research:

Climate change, extreme weather, and variable precipitation patterns affect Canadian agriculture in complex ways, improving conditions for some crops in northern regions while worsening conditions in others. Emerging agricultural technologies, such as controlled environment agriculture, can enhance the resilience and sustainability of Canada's fruit and vegetable sector by increasing local food production and potentially reducing Greenhouse gas emissions and water use. However, achieving sustainability depends on the policies, programs, and global trends guiding these technologies. Understanding the interaction between government policy, technology, and food system threats like climate change is crucial for future research. This research responds to these issues by examining the climate change risks, mitigation opportunities, and adaptation options for fruit and vegetable production in Canada, with a focus on British Columbia as a case study.

The Postdoctoral Fellow will:

- Work within an interdisciplinary project team
- Co-develop a Mitacs Accelerate Proposal with their supervising professor and i-Open Technologies
- Conduct a risk assessment of climate change on agri-food production in BC, focusing on BC's top five fruit and vegetable imports
- Conduct an opportunity assessment for implementing digital agriculture, controlled environment agriculture, and agri-genomics to mitigate climate change.
- Perform a climate policy scenario analysis to explore the possible effects of incentives for agri-tech adoption through spatial analysis and scenario modelling.