

# 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 Maia Farms.

## Position Details:

**Postdoctoral Fellow, Researcher**

**Paid Internship, University of the Fraser Valley**

**Contract Term:** 2 years

**Salary:** \$65,000/year plus benefits

**Anticipated Start Date:** September 2024

Preference to applications submitted by: **August 15, 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:

- Life Cycle Analysis
- GEL<sup>3</sup>S
- Agri-genomic Technologies
- Resilient and Climate-Smart Food Systems
- Just Transitions

**To apply, please send the following (2) documents to [charmaine.white@ufv.ca](mailto: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](mailto:stefania.pizzirani@ufv.ca)

## Description of Proposed Research:

The Canadian food system is becoming increasingly vulnerable to the effects of climate change, causing unprecedented shifts in the agricultural growing season, putting regional economies at risk, compromising food security in rural and urban areas, and impacting the well-being of millions of animals. As the global population increases and demand for animal-based proteins rises, these climate-related impacts on global food production are expected to intensify. Emerging agri-genomic technologies offer the potential to produce food with less dependence on suitable farmland, water availability, pesticides, and more. By conducting a Life Cycle Sustainability Assessment (LCSA) of emerging agri-genomic technologies (focusing on fermentation) this research project will analyze what are the environmental impacts of alternative protein production, including opportunities for land sparing, and how could data from an LCA influence policy?

## The Postdoctoral Fellow will:

- Work within an interdisciplinary project team
- Co-develop a Mitacs Accelerate Proposal with their supervising professor and Maia Farms
- Conduct a Life Cycle Sustainability Assessment of alternative protein production within the context of a case study with industry partner Maia Farms
- Conduct a quantitative and qualitative review of alternative protein supply chains, inputs and outputs, infrastructure, and more.
- Examine environmental, social, cultural, and economic impacts of alternative protein production with a focus on fermentation and land sparing opportunities
- Work with Maia Farms to trial and assess 3-5 different genetic feedstocks for their viability in the fermentation process