

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 YEX Inc.

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
- 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:

In British Columbia, the Fraser Basin and Salish Sea are facing declining salmon stocks raising significant concerns due to the ecological and cultural importance of salmon in this region. This situation prompts critical questions about the potential of emerging agri-genomic technologies, such as cellular aquaculture. These technologies hold the potential to increase agricultural production efficiency, sequester carbon, and reduce food waste, and are expected to make significant inroads in achieving Canada's 2030/2050 emissions targets in food systems. With the potential food system standing to be transformed through the introduction of agri-genomics technologies such as cellular salmon the benefits and impacts of these technologies require a better understanding.

The Postdoctoral Fellow will:

- Work within an interdisciplinary project team
- Co-develop a Mitacs Accelerate Proposal with their supervising professor and YEX Inc.
- Conduct a Life Cycle Sustainability Assessment (LCSA) of cellular salmon technology (and genomic technologies more generally) within the context of a cellular aquaculture case study with industry partner YEX Inc.
- Review and synthesis of the current state of agri-genomic technologies involving cellular aquaculture, evaluating their established or prospective effects via LCSA.
- Examine environmental, social, cultural, and economic impacts across every phase of cellular salmon production, with a focus on carbon footprinting, climate mitigation, economic aspects, and socio-cultural welfare.
- Explore the benefits and impacts of cellular salmon, with existing technologies and novel ones developed by YEX.