

University of Fraser Valley Xwe'eylh Lets'e/ One Health Hub

Integrated Thinking * Innovative Solutions * Healthy Outcomes

Together, we are applying new ideas to make people and communities healthier, protect our changing environment, enhance animal welfare, and sustain quality food production

The University of the Fraser Valley (UFV) is committed to leading the way in integrated health, environmental, and agricultural solutions through the creation of the One Health Hub. This initiative is guided by Indigenous knowledge and holistic approaches to health, sustainability, and land stewardship. It is designed to address some of the most pressing regional and global challenges, including food security, public health, environmental resilience, and workforce development. By fostering interdisciplinary collaboration, leveraging existing assets, and engaging key community and industry partners—including public health organizations, the Stó:lō Nation, NGOs, agricultural producers, processors, and innovators—UFV aims to position itself as a catalyst for innovation and problem-solving. The One Health Hub will serve as a convenor for research, education, and applied learning that enhances well-being, strengthens local economies, and supports long-term sustainability.

What is One Health?

One Health is an applied, transdisciplinary approach that studies the interaction between people and their containing ecosystems, most usually through the study of linked issues of human, animal, and ecosystem health.

This approach has developed over the last few decades in response to complex issues such as zoonotic disease and agricultural impact on ecosystem health and other issues that are poorly served by siloed approaches and study.

Universities and private-sector organizations have successfully used One Health to generate applied research solutions to emerging issues. This approach holds promise for industry, community well-being, and sustainability in the Fraser Valley as the region confronts systemic generational changes in population, climate, and economic conditions.



Vision

To establish the Fraser Valley as the Hub where Indigenous, public, private, and global expertise converges to create and implement innovative solutions that support sustainable growth, healthier people, sustainable food production, animal welfare, and more liveable communities.

Together, we will inform how we can protect our environment, water, and lands, ensuring the secure production and access to safe high-quality food and well-being for the Fraser Valley, and British Columbia in the face of climate, technological, population and global changes.

Mission

The One Health Hub at UFV will bring together local and global talent, community leaders, and Indigenous knowledge and scientific inquiry to enhance the well-being of people and the environment in the Fraser Valley and British Columbia. Through hands-on transdisciplinary learning and applied research, we will empower the next generation of leaders while working with industries, public health, governments, and communities to tackle complex challenges and seize opportunities.

By collaborating with farmers, food and beverage producers, and processors, we will drive innovation and solve challenges through applied research, supporting enterprise efficiency, growth, and profitability. Our efforts will support a growing, safe and secure food supply in the face of disease and climate risks, global supply chain disruption, and the competitive challenges ahead to meet local and global demand for quality food.

Our holistic approach will focus on the interconnections between personal, societal, and environmental health, addressing how population, climate and geopolitical changes impact water, land, and biodiversity. The Hub will continue to explore how we can anticipate and meet the needs of public health, food production, supply chains, and the ecosystems we depend on.

By leveraging data, research, technology, and the Fraser Valley's strengths, we will partner with institutions and enterprises to deliver solutions that enhance well-being, manage risks, and promote sustainable economic growth and community well-being.

The Opportunity

The Fraser Valley presents an ideal environment for the One Health Hub, given its diverse economic drivers, agricultural importance, and rapidly growing population. UFV is uniquely positioned to harness these factors, leveraging partnerships with industry leaders, Indigenous communities, and government agencies to address challenges related to food security, zoonotic disease, climate adaptation, and public health. The Hub will not only enhance UFV's research capacity but also create new opportunities for experiential learning, workforce development, and industry collaboration.

The One Health Hub will be developed through a phased approach to ensure sustainable growth and impact. Initial efforts will focus on establishing a foundation for research, education, and engagement, with future phases expanding into dedicated facilities, industry partnerships, and large-scale innovation initiatives.

Inventory of Assets

For over five decades, UFV has cultivated strong partnerships across diverse sectors, including the Stó:lō Nation, local governments, NGOs, and industry leaders in agriculture, health, and technology. These relationships have driven meaningful research and community initiatives—key strengths that will shape the One Health Hub.

UFV's research institutes and academic programs provide a strong foundation for interdisciplinary collaboration. By aligning efforts across municipalities, First Nations, industry, and government, UFV is uniquely positioned to drive innovation and create solutions that enhance public health, food security, and environmental sustainability.

The One Health Hub will further integrate these strengths, supporting applied research, industry partnerships, and hands-on learning opportunities for students. By leveraging UFV's existing assets and fostering new academic offerings, the Hub will strengthen connections between research, Indigenous knowledge, and real-world problem-solving. A full inventory of UFV's existing assets is included in **Appendix 1**.

Appendix I. One Health Asset Inventory

The University of the Fraser Valley (UFV) is well-positioned to establish the One Health Hub by leveraging its existing research centers, institutes, and academic expertise. These assets provide a strong foundation for interdisciplinary collaboration, applied research, and industry partnerships.

Research and Innovation Centers Supporting One Health

- **Centre for Education and Research on Aging (CERA):** Focuses on lifelong well-being, aging research, and community-based health initiatives, supporting UFV's Age-Friendly University designation.
- **Food and Agriculture Institute (FAI):** A leader in agricultural policy, food security, and agri-tech innovation, with partnerships spanning government, industry, and Indigenous communities.
- **Community Health and Social Innovation (CHASI) Hub:** Works with health authorities and community partners to advance public health, mental well-being, and social innovation in the Fraser Valley.
- **The Peace and Reconciliation Centre (PARC):** Supports Indigenous-led research and dialogue on land use, resource access, and historical impacts of public health crises.
- **Esposito Family Centre for Innovation and Entrepreneurship (EFCIE):** An incubator for new business and technology solutions, fostering innovation in sustainable industries, including health and agriculture.
- **Centre for Public Safety and Criminal Justice Research:** Examines public safety, emergency preparedness, and community health resilience.
- **BERRI Lab:** Conducts applied research on regional and Indigenous berry crops, supporting food security and agricultural sustainability.

Academic and Applied Learning Integration

UFV's faculties and schools contribute to One Health through teaching, research, and industry collaboration:

- **Agriculture:** AgTech Diploma, Agricultural Science, Food Safety & Security, Berry Production, Field Vegetable Production, Horticulture Crop Production and Protection, Integrated Pest Management, Livestock Production, Business administration for Agriculture Management, Culinary programming
- **Technology:** Digital Manufacturing, Electronics, Automation & Robotics, Engineering Mechatronics, Coding, Trades Management, Biotechnology
- **Sciences:** Biology, Chemistry, Physical Geography, Environmental Studies, Natural Sciences, Indigenous Maps, Films, Rights, and Land Claims, Regional and Community Planning, Bioinfomatics, Environmental sciences, Social sciences
- **Health:** Nursing, Kinesiology, Health Care Assistant
- **Business and Computing:** Business Administration (including Agri-Business Degree), Computer Science, Data Analytics, Artificial Intelligence