

## Strategic Research Plan 2010 – 2015

### Introduction

Teaching, research, and service to the community are essential and interrelated elements of the mandate of the University of the Fraser Valley (UFV). UFV faculty and students are committed to conducting research of the highest quality, meeting or exceeding scientific and professional standards. They are actively involved in various types of research, scholarly, and other creative activities in numerous disciplines. The University supports individual and collective research in all of its program areas and strongly encourages multi-disciplinary research. At UFV, teaching and research are intimately related, and the present plan seeks to enrich the learning experience of our students and create as many opportunities as possible for them to be actively involved in and learn through research.

The three major strategic goals adopted by the University of the Fraser Valley are to:

- Provide the best undergraduate education in Canada
- Be a leader of social, cultural, economic, and environmentally responsible development in the Fraser Valley, and
- Be innovative, entrepreneurial, and accountable in achieving our goals.

In particular, the University is determined to offer programs which use the best pedagogical practices, informed by a commitment to current research and scholarship, and engage students actively in their education through opportunities for practical experience, research, problem solving, and creative work. Furthermore, priority is given to research that benefits the economic, social, and cultural development of the Fraser Valley.

The present plan supports the University's strategic goals by:

- Facilitating the integration of research and teaching and multiplying the number of research opportunities for students
- Promoting and supporting the research, scholarly, and creative activities of faculty members, and,
- Supporting and developing multidisciplinary and collaborative research programs in five main priority areas.

### Major Goals and Objectives

1. Integration of research and teaching and increased research opportunities for students.

This objective will be achieved by:

- a. Supporting the development and implementation of research-based or inquiry-based curricula
  - b. Encouraging innovative ways of integrating research and teaching
  - c. Doubling each year, for three years, the number of opportunities for student involvement in research
  - d. Increasing the number of paid research assistantships for students
  - e. Supporting students' presentations of their research at academic and professional conferences.
2. Increased support for faculty members' research, scholarly, and creative activities.

This objective will be achieved by:

- a. Increasing faculty involvement and participation in research, scholarly, and creative activities
  - b. Increasing faculty participation and success rates in seeking and securing funding from the major granting Councils as well as from other less traditional sources of research funding
  - c. Ensuring that faculty have access to timely and useful information about research and research funding opportunities
  - d. Pursuing research opportunities and funding in cooperation with industry and community partners
  - e. Helping faculty increase their engagement in research and other scholarly activities by providing adjustments to their workload
  - f. Supporting the dissemination and publication of the results of faculty research
  - g. Enhancing technological and information resources, including library collections, in support of research and scholarly activities.
3. Substantial increase of multidisciplinary and collaborative research programs and activities within five priority areas.

This objective will be achieved by:

- a. Increasing institutional support for research in the five priority areas
- b. Identifying and actively pursuing research opportunities for collaborative research
- c. Entering into strategic partnerships, locally, nationally and internationally, with academic and research institutions, governments, and the private sector
- d. Strengthening the role and capacity of the University's research centres and institutes as practical vehicles for interdisciplinary collaboration.

## **Priority Areas**

In addition to its current programs of research in the areas of molecular sciences, human performance, border studies, and berry breeding, UFV has identified five priority areas in which it will strive to develop its research capacity and output. These priority areas reflect the University's research strengths and its intention to align its research and scholarly activities with its commitment to student learning and community development.

The five areas listed in alphabetical order are:

- Citizenship, Culture, Governance, and Human Rights

- Crime Prevention and Criminal Justice
- Environment and Sustainable Development
- Human Development, Health, and Well Being
- Scholarship of Teaching and Learning

## **1. Citizenship, Culture, Governance and Human Rights**

UFV recognizes and values the diversity of the peoples of the Fraser Valley and will continue to partner with various communities and organizations to pursue research in the areas of culture, citizenship, and human rights. This will involve, among others, the faculty and students involved in the Centre for Social Research.

Research in this area will be conducted in:

- a. Culture, social values, race, economic conditions, gender, religion, and ethnicity in defining citizenship, community, and social identity. This will build on existing research conducted by faculty who study areas such as Canadian identity, education and the rights of the child, and social justice.
- b. Indigenous issues, history, education, language and traditions, including collaborative research with the Stól:ō Nation, on whose traditional territory UFV is located, as well as other indigenous peoples and organizations. Some of the research will be conducted by the Tier 1 Canada Research Chair in Aboriginal Studies. Faculty from various disciplines will continue to be involved, including faculty from Geography, History, Social Work and Human Services, and Social, Cultural and Media Studies.
- c. Creative arts. The latter is a key contributor to the development and expression of cultures that shape individual and collective identities, add to the understanding and appreciation of culture, and help shape social values and attitudes.
- d. Issues and questions of interest to the Indo-Canadian community, including history, education, language and traditions, and access to health care and other services. This work will continue to be facilitated by the Centre for Indo-Canadian Studies.
- e. Canada-India trade, business and cultural relations, including the work of the BC Regional Economic Development Chair on Canada-India Business and Economic Development.
- f. Mennonite history, culture, literature and traditions. A new Centre for Mennonite Studies will be established.
- g. Theories and practices in international and community development and the role of technical assistance and international development policies and interventions in alleviating poverty, advancing human rights and promoting social justice. The Global Development Institute will continue to provide a focal point for these research and demonstration activities.

## **2. Crime Prevention and Criminal Justice**

UFV will continue to prioritize research in the area of crime prevention and criminal justice. That research will be conducted with a variety of partners at the local, regional, national, and international levels.

Research in this area will be conducted in:

- a. The root causes of crime, crime prevention, crime hot spots and crime reduction programs, repeat victimization analysis, prolific offenders, and the costs of crime and crime control. This will be supported by the work of the School of Criminology and Criminal Justice, the RCMP Research Chair in Crime Reduction, and the Centre for Criminal Justice Research - Sun Centre of Excellence, a high security crime analysis lab.
- b. The evaluation of public safety initiatives and the formulation, through research and evaluation, of evidence-informed approaches to promoting safe, healthy, and inclusive schools and communities through the work of the BC Centre for Safe Schools and Communities.
- c. The study of alcohol and drug use and abuse, gambling, and child safety through the work of the BC Centre for Social Responsibility.
- d. Juvenile crime and juvenile justice interventions.
- e. Performance and efficiency in the justice sector. Justice and security sector reforms, locally and internationally, as well as justice institution rebuilding in post-conflict societies. This work is supported by the rule of law program of the Global Development Institute.
- f. Transnational organized crime, human trafficking, corruption and terrorism as well as international collaboration mechanisms and challenges in addressing these transnational threats.

### **3. Environment and Sustainable Development**

The Fraser Valley has a diverse and cherished natural environment. The Valley is also one of the most important agricultural regions of the country due to its relatively mild climate and fertile soil. At the same time as agricultural production is intensified, the Valley's population is growing faster than almost anywhere else in the country. This raises some very important challenges in terms of sustainable development and the protection of the environment. Our research activities in the area of agriculture, social and economic development, sustainability, and food and water safety and security will be enhanced and accelerated.

Research in this area will be conducted in:

- a. Food and water safety and security, and productive and sustainable agricultural practices and technologies. This work will be conducted in collaboration with the agriculture-food industry, local and regional governments and other important stakeholders. A Tier II, Canada Research Chair will be recruited to anchor and lead a substantially enhanced program of research in this broad area.
- b. The application of glacial geology to understand the behaviour of the last Cordilleran Ice Sheet; the application of sedimentology, stratigraphy, and geomorphology, to understand the character and timing of long-term postglacial environmental change in western Canada. This research will help predict how the landscape might adjust to future changes in climate, and it is supported by the University's Luminescence Dating Laboratory.
- c. The application of paleoecological information to understanding the response of vegetation to past earthquakes, fires, floods, climate change, and anthropogenic modifications of the landscape. This work will contribute to our knowledge of how the environments have changed in the past, and it will add to the development of predictive models that can be used for risk management as well as to address issues such as invasive plant species. This research is supported in part by the University's Paleoecology Laboratory.

- d. Increasing our understanding of past and present human-environment relations in a bioregional context, which includes conceptions and expressions of relationship to place, and the impact of economic development on natural habitats of the Fraser Valley.
- e. Theories, methods and strategies to facilitate sustainable human, social, environmental and economic development in both developing and Western contexts, in part through the work of members of the University's Global Development Institute.

#### **4. Human Development, Health, and Well Being**

Human development, health, and well being will remain a priority research area for the University. This will build on the work of faculty from Kinesiology and Physical Education, Health Sciences, Psychology, Social, Cultural and Media Studies, the Centre for Education and Research on Aging, and, the Centre for Social Research.

Research in this area will be conducted in:

- a. Child development and child protection.
- b. Substance misuse and co-occurring disorders (mental health and addiction).
- c. The impact of physical activity on the motor ability of children with Fetal Alcohol Spectrum Disorder (FASD).
- d. The effects of exercise, physical activity, and an active lifestyle on health and wellness.
- e. Mild traumatic brain injury assessment and management.
- f. Studies of health issues affecting an aging population, such as obesity, diabetes, and diminished mobility.
- g. Cultural conceptions of health and well-being.

#### **5. Teaching and Learning**

UFV attaches a great importance to the scholarship of teaching and learning. Student involvement in inquiry learning and research provides unique opportunities for students to develop and acquire essential skills including analytical thinking, critical thinking, an ability to relate practice to theory, and communication skills. Gathering evidence of the effectiveness of new pedagogical methods and technologies is essential for achieving the University's strategic goals.

Research in this area will be conducted in:

- a. Research on how students learn, and in particular, how they learn through research and inquiry-based methods.
- b. Pedagogical methods and approaches.
- c. Online learning and the use of new technologies in support of teaching and learning.

## **Planning and Approval Process**

The present plan was developed in consultation with the University's Research Advisory Council, and all Faculty Councils and was approved by the Senate and the Board of Governors.

## **Assessment of the Plan**

Each of the three major goals and related objectives of the present five-year plan will produce measurable outcomes and will be reviewed and assessed every year over the five year period. Our goal of integrating research and teaching and increasing research opportunities for student involves five main objectives. Indicators of successful achievement of these objectives include the number of new courses developed to maximize the integration of research and teaching, and the number of students involved in research activities, publishing in peer reviewed journals, presenting at conferences, and applying for and being awarded graduate scholarships.

Eight objectives are identified in support of our goal of increased support for faculty members' research, scholarly, and creative activities. The indicators used to measure progress in achieving these objectives will include the number of successful applications to national granting councils and other research funding organizations, the number of studies published in refereed publications, peer-reviewed monographs and books, the number of presentations at academic and professional conferences, and feedback received from community partners.

The third major goal of realizing a substantial increase in multidisciplinary and collaborative research programs and activities within five priority areas will be measured in terms of the quality and quantity of the research collectively produced in these areas.