

Canada Research Chairs

Kwantlen recently received a *Special Allocation* of Canada Research Chairs. We have chosen to “split” the Tier 1 Chair and submit three Tier 2 nominations.

Two internal, retention, candidates have been identified in the field of Psychology (an emerging focal point building on existing strengths) and will be submitting applications at the April 2012 deadline. These two nominees are aligned with the SSHRC pool.

The third Chair has been assigned to Agriculture/Horticulture. This position will be filled by recruitment of a new faculty member who will integrate synergistically with the existing CFI-funded infrastructure (Institute for Sustainable Horticulture) and the new degree in Sustainable Agriculture. The nomination is proposed to be aligned with the NSERC pool.

Given our relatively small number of active researchers, and that the first competition was an internal, and open one, gender balance with only three Chairs is challenging. The internal call was structured such that “tenured” (regularized in our case) faculty were invited to apply. Four submissions were received, all from male candidates. Our three most senior female researchers did not apply; one deemed herself ineligible (20+ years since PhD), one is not a faculty member and holds a BC-LEEF Chair. The reason for the third not applying is unknown. The committee reviewing the submissions composed a 3-3 female-male split in reviewers.

To fill the remaining nomination (October 2012), we will recruit a new faculty member. Kwantlen’s process for recruitment is outlined in our Collective Agreement with the Faculty Association and meets the rigour for both legal and moral standards in equity. The search for a suitable candidate will be conducted under these conditions. The best candidate will be nominated. In the event that Kwantlen receives a future allocation of Chairs we will endeavour to continue to maintain a gender balance between the candidates being nominated to the Chairs program.

As an Institution receiving a Special Allocation of Chairs, we are limited in our LOF funding. Applicants are being encouraged to apply for the \$75, 000 available, with the emphasis being put on space renovations (our spaces are not optimized for lab work, however minor renovations will remedy this) and core equipment for the research. Where possible equipment will be requested through standard grants or partnerships funding; LOF funding will allow the acquisition of larger pieces of equipment vital to the research proposals.

Background

Established in 1981, Kwantlen Polytechnic University is Canada’s newest and most innovative polytechnic university, with four campuses located throughout the metropolitan Vancouver region of British Columbia, in Surrey, Richmond, Langley and Cloverdale. Kwantlen, which means “tireless runner” in the local First Nations dialect, represents the University’s commitment to achieving quality and excellence, integrating theoretical and applied learning, critical insight and practice into its programs. Respecting the uniqueness and richness of First Nations’ learning and wisdom, and the distinctiveness and dignity of the culture, Kwantlen takes to heart the belief that all forms of cultural expression enrich one another. Hence, it is committed to the tireless pursuit of lifelong learning, teaching, research and innovation that focuses on the human capacity to influence and improve the region, the province, the country and the world. To this end, a Kwantlen credential is designed to successfully meet current and future needs of regional and global employment markets. Kwantlen students have a unique opportunity to bridge certificate and diploma credentials into bachelor’s degrees for academic and professional enhancement of applied and technical programs.

Kwantlen's mission is to create outstanding educational experiences that prepare learners at all levels for leadership, service and success. Providing students with the skills and understanding necessary to be engaged, aware, and responsible citizens, and to pursue fulfilling careers via teaching and learning, is offered through a diverse portfolio of 120 programs, serving over 17,500 students annually. Growth in research is vital to enhancing teaching and learning. Hence, Kwantlen's investment in research excellence is a key strategy in developing its mission to serve community stakeholders. Research at Kwantlen is now formally recognized within the campus culture as essential for Kwantlen's future development. The Institution's approach to research embodies its traditional core values of providing accessible, student centred, diverse, respectful, and trustworthy learning, decision-making and contributions to the communities it serves.

This Strategic Research Plan represents an interim document as, throughout 2012, the University is undergoing an extensive Strategic and Scenario planning process. Kwantlen is in the process of re-conceptualizing the place that research and scholarship holds within faculty leadership. Recognizing this obligation in the faculty collective agreement, in developing existing faculty, and in recruiting new faculty is crucial to Kwantlen's ability to increase its quality of education and community impact, expand its capacity for research and innovations, and integrate research into the educational and training experience.

Research at Kwantlen

The polytechnic university research model merges the strengths of both theoretical and applied discovery. To avoid any of the weaknesses of the traditional university model while achieving success on its own terms, research at Kwantlen requires a solution unique to Kwantlen's history, academic strengths and strategic direction. Research has to be relevant to and positively impact students, faculty, staff, industry, the community, the region and the province, yielding outcomes and impacts that propel Kwantlen towards its goals. Hence, research and scholarship at Kwantlen is a dynamic process that consists of discovery, application, integration, teaching and learning, and creative artistry. The key elements of research at Kwantlen are:

- **Learner Centred:** Research strives to positively impact students at all levels, from certificate programs through to degree programs, via the transfer of knowledge into the classroom, the active involvement of students in research activities and the development of student research skills.
- **Stakeholder Centred:** Outcomes and impacts of research are directly relevant to the goals, aspirations and plans of students, faculty, staff, community organizations, industry, and municipal, provincial and federal governments.
- **Impact:** Research at Kwantlen is focused on maximizing positive social and economic impacts on stakeholders.
- **Integrity:** Kwantlen's research activities are conducted to the highest standards of scholarship, ethics and discovery.
- **Complementary:** Research activities work in tandem with other learning, teaching and administrative activities to propel Kwantlen forward towards its short- and long-term strategic goals.
- **Collaborative:** Faculty engaged in research are connected to external local, provincial, national and international institutions, organizations, industries and networks to maximize opportunities for knowledge sharing and knowledge gain.

- **Multidisciplinary and Interdisciplinary:** Researchers come together to share ideas. Innovation in research is encouraged through investigators partnering across disciplines. To facilitate this, four themes have been developed to provide a framework for the exploration of new knowledge by transcending the borders of traditional disciplines and academic units.

Kwantlen's pursuit of research and scholarly activity aims to enhance the undergraduate experience in ways relative to both continue study and employment opportunities in a rapidly changing, information-based economy. For students, engagement in research develops skills in teamwork, decision-making, critical thinking, hypothesis testing, knowledge creation, resourcefulness, personal and project management, effective communication, reporting skills, public speaking and presenting, research ethics, protection of intellectual, technical skills, interpersonal skills, numerical literacy, dedication and commitment, articulation of complex issues, applying knowledge for the benefit of stakeholders, putting classroom knowledge into practice, and turning practice into further classroom knowledge. Faculty benefit from research activities by maintaining cutting-edge knowledge and applying this to their discipline. Increasing scholarly activity increases Kwantlen's reputation and achievements as well as the currency of faculty knowledge, which will enable Kwantlen to achieve its retention and recruitment goals. Research will also benefit Kwantlen's community stakeholders. Research affords increased opportunities for integrating university programs with community objectives by exploring solutions for challenges and issues they both face. With students undertaking community and applied research, learning outcomes are incorporated into the areas of leadership, service and active citizenship. Community outreach also provides an opportunity for research discoveries and innovation to advance business, industry and government policy for the economic and social benefit of the population served by Kwantlen and beyond.

Research conducted by public sector, post-secondary education institutions is a core component of Canada's social and economic development. Federal and provincial governments alike have recognized the need to invest in public sector research to encourage innovation, multidisciplinary and interdisciplinary initiatives, and partnerships with industry. Researchers and their collaborators need not work in isolation; globalization ensures that information and discovery can be shared instantly with others around the world, providing benefit for all. As a university with an explicit polytechnic mandate, Kwantlen is well positioned to take advantage of the strategic shift toward "relevance", "outcomes", "impact" and "benefits to Canada" that is occurring in academic research nationally. Kwantlen's research programs are multidisciplinary and multi-sector, integrating students into research and research outcomes as part of their educational experience. Connecting with the external community provides students with both campus-based and real world focused experience, characterized by an increasingly flexible mix of face-to-face learning, resource-based study, research activities and workplace exposure.

Research Priority Areas

As programs at Kwantlen have evolved into an integrated mosaic broadly aligned to the four areas of: Environment; Technology, Design and Enterprise; Society; and Health, so have its research activities.

Environment

Increasing populations have placed increasing demands on our environments. Globalization has brought the concept of environmental stewardship to the fore, with such challenges as escalating

economic demands, rapid population growth, exploitation and consumption of the earth's resources, and the effects of human activity on the environment. Studying complicated ecosystems and long-term effects on land, water and climate is painstaking, but heightening demands on the earth's societies to crisis point require understanding of the physical and biological biodiversity of our environments, sensitive management and planning, and innovative achievement. Sustainability is a great challenge, but a necessary goal. Understanding how nature reacts to stresses on climate, land, water, plants, animals, air quality and man's activities will lead to positive developments in sustainable growth and productivity. Existing areas of research strength at Kwantlen are found in Biological Pest Management, Sustainable Urban and Peri-urban Horticulture Practices, and Integrated Horticultural/Agricultural practices. Emerging areas are found in Environmental Management, Crop Yield, Green Waste Management, Biofuel Production and Utilization, and Greenhouse Design Technologies. The key research initiative linked to this theme is the Institute for Sustainable Horticulture (ISH). ISH was created in 2004 as a partnership between academia, horticultural industries and the community to support British Columbia in meeting demands for a higher level of sustainability and environmental responsibility from horticulture, silviculture, forestry, and urban landscapes. Sustainable horticulture is a system built on the pillars of environment, economy and culture, a system in which: resources are kept in balance through conservation, recycling and or renewal; practices developed preserve horticultural resources and prevent environmental degradation to on-site and off-site land; production, profits and incentives remain at acceptable levels; and community is an integral part of the system. ISH goals are to: work in collaboration with industry to consolidate and advance British Columbia's position as a leader in sustainable horticulture research, development and application; build a network of collaborative academic and industrial research in sustainable horticulture; provide a forum for third-party informed analysis on sustainability issues; enrich the educational experience for students in sustainable horticulture. ISH theme areas include: Ecosystem sustainability, Urban Agriculture, Integrated Pest Management, Industrial Innovation, Community Awareness, Education and Training.

Technology, Design and Enterprise

Technological innovation over the last hundred years has been incredible in its scope and effect. What was seen as innovative only a few years ago is now incorporated into everyday life. Now, more than ever, advances in Technology, Design and Enterprise are depended upon to facilitate almost every aspect of human life, impacting health, industry, communication, where we live, how we live, how we learn, how we work, what we eat, what we wear, and how we perceive the world around us. Existing research strengths at Kwantlen in this theme are found in the areas of Human Learning Systems, Mechanical and Computerized Functions in Art, Ergonomics, Human Factors & Digital Systems, Horticulture Product Development, Fashion Design & Technology, Textile Testing, Interior Design, and Information Technology in Education. Emerging areas are found in Information Technology Knowledge Management, Automotive Industry, Marketing Education & Effectiveness, Technological Commercialization, e- Commerce, Information Technology & Business, and Business Trends such as Entrepreneurship & Small Business Studies, Artificial Intelligence, Data Warehousing, Data Mining, Human/Machine Interaction, Networking, Data Communications, and Accounting Practices. The following future initiatives are being developed: the Institute of Mechanical & Industrial Design, the Institute for Entrepreneurial Research, and the Technical Textile User-centred Design Institute (TUDI). TUDI's program of research and technology development is designed to meet the needs of

Canada's textile industry by focusing not only on the technology development activities that drive product innovation but also the basic research that will ensure the industry to remain competitive. TUDI research outcomes will include new prototypes, processes, technologies and training opportunities, allowing students to participate in real-world projects funded by industry partners.

Society

The impact of recent and rapid change on societies, cultures, languages and values is evident every day. Events unfolding worldwide have and will continue to alter the quality of our lives irrevocably. The Society theme encompasses issues that affect populations and communities locally, nationally and globally. By utilizing various branches of knowledge, research in this area will increase our understanding of cultural evolution and societal change by facilitating the examination of social and economic policy. Kwantlen is engaged in scholarship that informs one's ability to manage change for future benefit. Kwantlen's first Canada Research Chairs are proposed for the area of Psychology. The proposed Chairs will lead research programs that a) fuse developmental and cognitive psychology to develop tools and applications that examine hindsight bias and theory of mind in children, adults, and the elderly, and b) that will impact psychological practice and policy development in strategic areas throughout Canada. Existing research strengths are found in the areas of Philosophy, Ethics, Anthropology, Sociology, Race & Ethnicity, Nationality & Citizenship, Multiculturalism, Religion, Aboriginal Culture, Gender Studies, Politics, Law, Justice, History, Criminology, Domestic Violence & Hate Crimes, Geography, Psychology & Identity, Educational Leadership, Language, Colonialism, Community, Globalization & Trade, Journalism & Censorship, North American, European, Asian & Russian Studies, and Art, including Visual Arts & Sculpture. Emerging areas are found in Positive Psychology, Cognitive Psychology in Traffic Safety, and Urban Design. Key units linked to this theme are the Centre for Interdisciplinary Research: Community Learning and Engagement (CIR:CLE) and the Institute of Transborder Studies. CIR:CLE has been developing collaborative research projects in four core areas of focus: Aboriginal Community Development, Addictions Research, Safe Communities, and South Asian Community Development. In the CIR:CLE, community-based research is practical and applied, leads to action, encompasses academic as well as non-academic research, and creates sustained relationships between Kwantlen's researchers and community partners.

Health

Globally, health and wellness issues are prominent in government agendas due to an increasingly aging population, enormous medical and technical advances and demands, and greater knowledge and understanding of the part preventative medicine plays. Research achievements in this area can directly and indirectly translate into profound benefits to the physical and mental health and wellbeing of the world's citizens. As well, advances in health bring moral and ethical questions to the forefront, the answers to which affect public policy with their inherent legal and moral implications. Existing research strengths at Kwantlen in Health are found in the areas of Health Promotion, Primary Health Care & Professional Practice, Aboriginal Health Access, Medical Anthropology, AIDS, Maternity Care, Nursing Education & Decentralization, Healing & Caring, Ethics, and Bioethics. Emerging areas are found in Cardiovascular Disease in At-risk Communities, Yoga as a Health Intervention, and Stress. There is currently no research unit linked to this area.