

STRATEGIC RESEARCH PLAN SUMMARY 2022-27

This foundation plan *Transforming Learning through Knowledge Creation* establishes the priority goals, objectives and strategies for Scholarship, Research and Creative Activity (SRCA) at Vancouver Island University (VIU) over the 2022-27 timeframe. Where our 2017-22 plan focused on building a culture of SRCA, this plan aims to expand access to opportunities for those who wish to engage in SRCA and continue to build individual and institutional capacity for inclusive excellence.

1. CONTEXT FOR SCHOLARSHIP, RESEARCH AND CREATIVE ACTIVITY

VIU's Strategic Plan: *People, Place, Potential* includes a commitment to grow to be the region's hub for research and expertise. VIU's Academic Plan: *Weaving our Journey Together* aligns with our commitment to access by incorporating a goal to increase the number of students at VIU who will have an opportunity to engage in research. As a comprehensive teaching university, VIU utilizes the expanded definition of scholarship and research that classifies four types of scholarship as proposed by Ernest Boyer¹: 1) the ***scholarship of discovery***, which includes original research that advances knowledge; 2) the ***scholarship of integration***, which includes synthesis of information across disciplines, across topics within a discipline or across time; 3) the ***scholarship of application***, which involves the application of disciplinary expertise with results that can be shared externally; and 4) the ***scholarship of teaching and learning***, which allows for public sharing and the opportunity for application and evaluation by others. The ***scholarship of engagement***, often regarded as the fifth type, refers to the use of scholarship to understand and solve pressing social, civic and ethical problems.

2. SRCA STRENGTHS AND FOCUS AREAS

Health, resilience and well-being This theme focuses on the study of human and environmental health with the aim of improving the adaptive capacity of humans and systems. Contributions of VIU employees and students over the past five years have resulted in innovative health initiatives, impactful health outcomes and mutually beneficial partnerships with Island Health, the Ministry of Health and numerous community partners.

Integrated sciences, technology and environment This theme focuses the contributions of VIU scientists and technologists to identify new approaches to sustainability, climate change and the environment. In the past decade, VIU researchers have pursued bold and impactful work to measure progress on the sustainable development goals, measure chemical pollutants in air and water systems, identify impacts of thermal changes on fish and shellfish, and monitor changes in coastal snowpack and forest cover. These contributions have resulted in VIU being recognized within the region, Canada and beyond.

Resilience of island, coastal and rural regions VIU is located in an island and coastal region comprised of mostly rural communities who have been experiencing significant shifts due to globalization, climate change, demographics, and population migration. These shifts have

¹ Boyer, E.L. (1990) *Scholarship reconsidered: Priorities of the Professoriate*, Carnegie Foundation for the Advancement of Teaching.

presented opportunities and challenges, pressuring the region to adapt. This theme captures VIU studies that profile the realities, adaptive responses and challenges of people, communities and organizations in island, coastal and rural regions. The outputs have been critical to inform regional planning, management and development decisions while contributing to the growing literature on resilience in numerous disciplines.

Innovation, entrepreneurship and social change This theme profiles the work being done to identify and monitor changes in the business and management models used across sectors as well as the associated outcomes of innovation and social change. Knowledge outputs have resulted in improved practices in non-academic settings and contributed to the expanding literature.

Cultural, heritage and creative expression This area explores the various ways cultures may use, or have used, literary, political, social, and artistic forms of creative expression. Exploration is done through the examination and analysis of texts and images, the restoration and presentation of works of art, the critical evaluation of historical and modern culture, the theory informed study of past human activity, and the creation of knowledge through art and its performance.

Equity, diversity and social justice As a values-based institution, VIU is committed to respect and diversity, and to promoting respectful, informed discourse about reciprocity and reconciliation as identified by the Truth and Reconciliation Commission of Canada Calls to Action. Issues of equity, diversity and social justice have gained elevated importance and urgency in recent years in order to ensure that access to social and economic resources are provided to everyone.

Teaching and learning VIU has developed expertise in innovative teaching and learning practices. This inquiry has practical value in that it enhances the learning experiences of students, while enabling faculty to continuously reflect upon and improve their teaching practices, obtain evidence of their impact on student learning and make informed decisions for enhancing learning experiences. Faculty inquiry and reflection also has scholarly value to external audiences when it is shared beyond the University.

3. PATHWAY TO EXCELLENCE

The pathway to excellence in SRCA at VIU will be facilitated by using a life-cycle framework (Figure 1) whereby actions are taken by VIU at all stages of the research process to support the development of talented individuals and clusters and to celebrate learning achievements internally and externally.

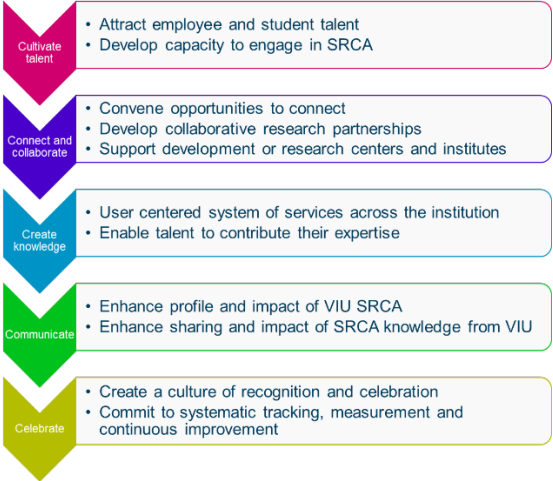


Figure 1: Lifecycle framework to developing inclusive SRCA excellence

Goals, Objectives and Strategies

| People - Goal 1: Cultivate talent among employees and students to enable engagement in SRCA | | |
|--|--|---------------------------------------|
| Objectives | Strategies | Milestones and Metrics omitted |
| 1.1 Attract employee and student talent to contribute VIU expertise to society. | <ul style="list-style-type: none"> Scholarship, Research and Creative Activity (SRCA), Human Resources (HR), and Marketing and Communications will elevate the profile and impact of VIU's SRCA activity. SRCA and Advancement will identify and secure resources to establish new research and innovation chairs aligned with VIU SRCA strengths. SRCA and HR will collaborate to create tools and resources to support employee recruitment. SRCA will host an annual new employee orientation to SRCA each September. Marketing and Deans to review websites and develop templates to better profile faculty. | |
| 1.2 Develop capacity to engage in SRCA among employees and students | <ul style="list-style-type: none"> HR, the Provost, and SRCA to consider the Ministry of Advanced Education and Skills Training recent guidance for teaching institutions and related labour relations guidelines on research. Deans will ensure that the workload assigned for student mentorship in SRCA aligns with Collective Agreements; HR will review the formula for faculty mentorship of student SRCA. SRCA and Advancement will identify and secure resources to provide competitive funding. SRCA to complete and launch EDGE, a researcher development program. SRCA to conduct a review of internal funding for employees and students to engage in SRCA Deans will identify annual priorities to support Faculty goals related to SRCA. | |
| Place - Goal 2: Connect and collaborate to co-create knowledge outputs | | |
| 2.1 Opportunities for collaborative projects | <ul style="list-style-type: none"> The SRCA Office will convene 8-10 events for Faculty and students to share SRCA projects. | |
| 2.2 Develop collaborative research partnerships and networks within VIU and externally | <ul style="list-style-type: none"> SRCA and the Office of Community Partnerships will identify and connect potential partners. External Relations and the SRCA Office will fundraise to maintain the Regional Initiatives Fund to leverage VIU expertise in the region. SRCA and Communications to profile a min. of 10 SRCA partnerships via media platforms. SRCA to track and measure the impact of partnered research projects. SRCA and OIEE will provide resources for partnering with Indigenous communities. International Ed. and SRCA will identify international engagement & needs of employees. | |
| 2.3 Support research centers and institutes | <ul style="list-style-type: none"> Deans and AVP SRCA to promote and support proposals for research centers and institutes. Existing centers and institutes will develop proposals for Senate approval by Dec 2023. Directors of centers and institutes will develop annual reports and share with Senate. SRCA and Communications will profile the work of VIU research centers and institutes. | |
| Potential - Goal 3: Create knowledge, applications, innovation and works | | |
| 3.1 Ensure supports and a user centered system of services for SRCA | <ul style="list-style-type: none"> SRCA will share insights from the "What we heard report" with HR, Finance, IT, Communications and Facilities to commit to more efficient systems/supports for SRCA. SRCA will initiate a taskforce to improve efficiencies in services and supports for SRCA. SRCA will provide opportunities for annual feedback on institutional services and supports. | |
| 3.2 Enable VIU talent to create knowledge | <ul style="list-style-type: none"> SRCA and OUPA to compile annual reports from Faculty Activity Reports (where permission is granted) to identify and highlight VIU's SRCA impacts to society. | |
| Potential - Goal 4: Communicate SRCA outputs into the public realm | | |
| 4.1 Enhance the profile and impact of VIU employee and student SRCA | <ul style="list-style-type: none"> SRCA and Communications to develop a research communications strategy by March 2023. Office of Community Engagement and SRCA to encourage and support knowledge mobilization (KM) events by September 2023. Deans to encourage and support speaker series events and other knowledge mobilization. | |
| 4.2 Enhance the sharing and impact of SRCA knowledge created at VIU | <ul style="list-style-type: none"> SRCA, the Library and IT will publish VIU's Data Management Strategy by March 2023. SRCA will review existing resources and identify best practices in KM. SRCA will develop modules for the EDGE program on KM and research data management. The Writing Centre and SRCA will collaborate to host an annual writing retreat. The Library and SRCA will collaborate to enable open access publication. SRCA and the Library will develop a dashboard to monitor the impact of VIU publications. | |

| Potential - Goal 5: Celebrate and commit to continuous improvement | |
|--|--|
| 5.1 Create a culture of recognition and celebration of SRCA | <ul style="list-style-type: none"> • Deans will identify and support recognition and celebration of SRCA activities each year. • SRCA and Advancement will increase student awards at CREATE 10% annually. • SRCA and Communications will release an annual Research and Creative Activity report. • SRCA will host an annual recognition event for internal award recipients each year. |
| 5.2 Commit to systematic tracking and improvement | <ul style="list-style-type: none"> • SRCA and the Office of Institutional Planning will design a dashboard for SRCA. • SRCA to provide opportunities for annual feedback on institutional services and supports. • SRCA and Deans to conduct annual meetings with Research Chairs and Tri-agency grantees. |

4. MEASURING SUCCESS AND REPORTING BACK

The SRCA dashboard will be updated each year in May and metrics will be highlighted in the annual Research and Creative Activity report. The SRCA Office will review the metrics each June for priorities and work plans for staff.

5. DEVELOPMENT PROCESS

This plan emerged after a consultative process between Sep 2021 to Feb 2022 with input from approx. 560 people, including the Deans of each Faculty, Faculty, Students, Members of President’s Council and a Steering Committee.

APPENDIX 1 - RESEARCH AND INNOVATION CHAIRS

Research and innovation chairs are key positions that contribute to research excellence at VIU. VIU currently has four Tier 2 Canada Research Chairs, two BC Regional Innovation Chairs and two Michael Smith Health Research BC Award holders. See Table 1 below: Research and Innovation Chairs at VIU by type and research focus area:

| CHAIR TYPE | CHAIR TITLE | TIER | RESEARCH DISCIPLINE | CURRENT STATUS | GRANTING AGENCY | RESEARCH STRENGTH AND FOCUS AREAS |
|-----------------------------|---|------|--|----------------|--------------------|--|
| Canada Research Chair (CRC) | Shellfish Health and Genomics | 2 | Evolution, genetics, breeding and environmental adaptation | Filled | NSERC ² | <ul style="list-style-type: none"> • Integrated sciences and environment • Resilience of island, coastal & rural regions |
| Canada Research Chair (CRC) | Human Dimensions of Sustainability and Resilience | 2 | Forestry, agriculture, GIS | Filled | SSHRC | <ul style="list-style-type: none"> • Health, resilience and wellbeing • Innovation, entrepreneurship and social change |
| Canada Research Chair (CRC) | History of Women’s Health | 2 | History, health, indigenous knowledge | Filled | SSHRC | <ul style="list-style-type: none"> • Equity, diversity and social justice (EDI) • Cultural, heritage and creative expression |

² NSERC is the acronym for the Natural Sciences and Engineering Research Council of Canada, SSHRC is the acronym for the Social Sciences and Humanities Research Council of Canada, CIHR is the acronym for the Canadian Institute for Health Research, BC LEEF is the acronym for the BC Leading Edge Endowment Fund now administered by the BC Innovation Council.

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| Canada Research Chair (CRC) | Community Based Research | 2 | Education, indigenous knowledge | Filled | SSHRC | <ul style="list-style-type: none"> Teaching and Learning EDI |
| BC Regional Innovation Chair (BCRIC) | Aboriginal Early Childhood Development (AECD) | NA | Childhood dev., education, indigenous knowledge | Filled | BC LEEF/BCIC | <ul style="list-style-type: none"> Teaching and Learning EDI |
| BC Regional Innovation Chair (BCRIC) | Tourism and Sustainable Rural Development | NA | Economic development, sustainability, tourism mgmt. | Filled | BC LEEF/BCIC | <ul style="list-style-type: none"> Resilience of island, coastal & rural regions Innovation, entrepreneurship and social change |
| Michael Smith Health Prof. Investigator | | NA | Nursing, psychedelic assisted therapy | Filled | MSHRBC | <ul style="list-style-type: none"> Health, resilience and well-being EDI |
| Michael Smith Scholar | | NA | Nursing, brain injury | Filled | MSHRBC | <ul style="list-style-type: none"> Health, resilience and well-being EDI |

BCRIC in AECD: strengthens the local and cultural relevance of education for AECD practitioners, and develops innovative, high quality, community-based programs to positively influence the holistic development of Aboriginal children, families, and communities. The collaboration between VIU, First Nation communities and Aboriginal organizations and agencies holds great promise to positively influence the health of families in Aboriginal communities. **BCRIC in Tourism and Sustainable Rural Development:** supports the sustainable development of tourism in BC's rural communities through collaboration with industry, community and government. **CRC in Shellfish Health and Genomics:** A Tier 2 CRC focuses on expanding the knowledge base in invertebrate immunology by identifying new immune pathways in the oyster. Focused on BC, this research examines the response of the Pacific oyster to two climate-change exacerbated threats: ocean acidification and Vibrio bacteria. An expected outcome is a selective-breeding program to future-proof the Canadian shellfish industry. **CRC in Community-Engaged Research:** A Tier-2 CRC focuses on collaborative, creative and cross-cultural youth-led community research. In the first term, the objective is to stimulate culturally responsive learning through youth-led public art projects involving literacies and participatory visual methodologies, such as theatre, mural painting, spoken word poetry, hip-hop music, and digital story-telling. **CRC in Human Dimensions of Sustainability and Resilience:** A Tier-2 CRC aims to clarify the extent and nature of reforestation and related wildfires around the world and improve our understanding of the nature of global forest change by developing new Earth observations that link local and regional agrarian and forestry trends. The CRC also advances new theoretical models of forest recovery and wildfires, satellite datasets and enhanced research networks. Ultimately, this research will help mitigate climate change by suggesting new techniques to restore forests and prevent wildfires. **CRC in History of Women's Health:** A Tier-2 CRC explores the history of women's pain in modern Canada. In the first term, this CRC focuses research on twentieth-century birth cultures (with a specific focus on Vancouver Island), while building collaborations in the study of gendered medical violence, and exploring the history of women's pain across the life cycle with the ultimate goal of improving women's encounters with the Canadian health care system. **MSHRBC HPI:** focuses on resilience and psychedelic-assisted therapies. With the support of like-intentioned others and provincial and national grant support, the HPI spearheads a community of practice to facilitate resilience : Roots to Thrive (RTT) and a psychedelic-assisted therapy program: RTT-KAT (Roots to Thrive + ketamine-assisted therapy). **MSHRBC Scholar:** focuses on the effects, underlying pathophysiological mechanisms, biomarkers, and treatments of traumatic brain injury (TBI) and related conditions. This Scholar supports a community of practice critically important to VIU community partners and seeks to positively impact vulnerable populations struggling with trauma and the related challenges due to socially structured inequalities.