

# Office of Applied Research

The JIBC Strategic Plan 2010 – 2015 envisions the JIBC as a "world leader in justice and public safety education and research." The Office of Applied Research and Special Projects supports this vision through an integrated program of work with a pan-Institute focus and mission – one which includes both strategic and tactical objectives as we move forward to build research capacity and leadership.

## Vision

### Mandate, Vision, and Goal

We are dedicated to promoting social change and social justice that helps keep our communities safe through applied research with first responders, practitioners, first receivers, policy makers, stakeholders, and service users. We advance our vision of leadership in justice and public safety education and research by informing public policy, increasing public awareness, enhancing justice and public safety curriculum, and leveraging learning technologies and methodologies.

By 2015, we anticipate the JIBC will be at the forefront of applied research in public and community safety in British Columbia, Canada. As a unique international post secondary institute in public safety, with professional, undergraduate, and graduate programs, the JIBC will promote and host a unique research signature, one that inspires solutions and is targeted to meet public and community needs.

The design and delivery of our research is conducted primarily from the 'stand-point' of First Responders and First Receivers – thus ensuring a unique niche for the Institute. We will foster research that promotes social change and social justice – through action, practice/praxis and adaptive research. We will:

- Advance research that makes a difference to society through state-of-the-art curricula, interventions, and contributions to public safety.
- Create new knowledge and understandings by asking new questions through knowledge generation, exchange, mobilization and 'uptake' by decision makers, including policy and practice audiences.
- Provide research leadership, stewardship, and mentorship.
- Build a transformative Office of Applied Research and Special Projects a leading edge focal point in Canada and internationally for public safety education, research and scholarship.

# Capacity

## History

The JIBC has a thirty year history of leadership, innovation, and collaboration with industry and public partners in the fields of justice and public safety. JIBC Schools of Community and Social Justice, Health Sciences, and Public Safety and Security work within their disciplines to develop solutions to practical problems in applied settings. Their projects have provided insight, developed new knowledge, and fostered change in justice and public safety practice and education.

The Justice Institute of BC, in its 2007-2010 Strategic Plan, called for the creation of an "Office of Applied Research and Special Projects". In 2008, Dr. Carol Amaratunga was recruited as Dean, Applied Research. The newly created Office quickly consolidated and further developed the

JIBC's applied research infrastructure and capacity. Today, the programmatic work of this office comprises a suite of interrelated projects, activities, and services which share a common goal and vision, with measurable objectives. The OAR continues to receive direct financial and physical infrastructure support from the Institute as it builds both individual and institutional research capacity throughout the JIBC. In addition, OAR, working with the JIBCs Schools, has successfully obtained funding in excess of \$10 million in the last three years.

In 2010, OAR developed and implemented a suite of policies and procedures to support the JIBC's strategic research plan and accomplish its research goals. These provide the framework and direction for research undertaken by the JIBC. OAR has further encouraged the development of research capacity through sponsorship of ongoing presentations, workshops, and retreats for JIBC faculty and staff.

#### Infrastructure

The JIBC supports research both through the Office of Applied Research and projects housed within specific Schools and Divisions. The Office of Applied Research projects focus on multi- or interdisciplinary initiatives, while JIBC Schools engage in applied research within their specific domains, disciplines, and areas of expertise. In addition, the Office of Applied Research provides centralized support, expertise, and mentoring to projects at the School and Division level.

In addition to the development of procedural and administrative infrastructure through policy and procedures, OAR sponsors and supports the JIBC Ethics Committee and the JIBC Applied Research Committee.

The JIBC Research Commons facility provides office space and physical resources for the staff of OAR's ongoing and future research projects. Currently the Research Commons houses the CRTI Project Secretariat and the Centre for the Prevention and Reduction of Violence.

The core staff of the Office of Applied Research includes the Dean, Research Strategist, and Administrative Research Assistant. OAR has dedicated space and physical resources, including offices for core staff.

OAR projects are supported through a variety of research personnel:

- Research Chairs (in development)
- JIBC Research Associates (please refer to the JIBC website for a list of current research associates: http://www.jibc.ca/research/research-team)
- JIBC Post-Graduate Fellows and Graduate Students (e.g. Masters and Doctoral students)
- Primary/Lead Investigators
- · Sessional Researchers
- · Community-based Researchers
- Research Project Manager
- · Research Operations Manager
- · Administrative Research Assistants

In addition, each JIBC School and Division conducts ongoing research projects using a combination of full-time faculty, project-based personnel, and external consultants. Researchers have access to the physical and personnel infrastructure of the schools; including extensive live simulation facilities such as the Maple Ridge live fire campus, purpose built simulation facilities at the JIBC's New Westminster campus, and the Dr. Rix Simulation Centre, which includes a large simulation "garage" and a technology-supported multi-agency exercise space. The JIBC's unique relationship with operational justice, public safety, and health agencies and practitioners, both in BC and internationally, provide access to field personnel and community/operational research

sites that further support our signature research from the standpoint of First Responders and First Receivers.

The JIBC currently has letters of understanding with the School of Social Work (UBC), The FREDA Centre for Research on Violence Against Women and Children (SFU), as well as Natural Resources Canada (NRCAN). OAR is also collaborating with UVIC as part of the Violence Reduction Circle initiative.

#### **Current Initiatives**

The Office of Applied Research fosters social change and social justice through applied research with those who keep our communities safe. OAR collaborates with public and private sector partners to attract and secure ongoing funding with the JIBC Schools e.g. the School of Public Safety and Security, the School of Health Sciences, and the School of Community and Social Justice.

The current research portfolio includes funding from foundation grants e.g. the J. Howard Webster Foundation, the Vancouver Board of Trade Foundation, provincial government e.g. WorkSafeBC and federal government e.g. Department of National Defence Centre for Security Science contract research. In all, for 2011/12 research project and proposal commitments pending approval are in excess of \$10 million.

Examples of major applied research commitments, including in-kind commitments include:

- Centre for Prevention and Reduction of Violence (\$413,000) approved and in progress
- Building Resilience and Rural Health System Capability for Pre-Disaster Planning and Preparedness (Rural Disaster Resilience Project <u>www.rdrp.ca</u>) – status approved and in implementation (\$3,174,186).
- Simulation Training and Exercise Collaboratory (SIMTEC): Enhancing CBRNE Psychosocial Capacity and Capability Management (\$3,635,604) – status approved and pending contract signature
- Interoperability and the Canadian Certification Registry (CCR) (\$2,696,160) proposal under peer review

In addition, Office of Applied Research houses the Centre for Prevention and Reduction in Violence, which is conducting a series of 3 subproject studies:

- Process of Discovery initiative explores intimate partner violence in the South Asian community.
- Code White a study in collaboration with St. Paul's Hospital and UBC, investigates violence against health care workers and successful intervention processes in partnership with the University of British Columbia and St. Paul's Hospital.
- Violence Reduction Circle initiative a policy research project in collaboration with Simon Fraser University, University of Victoria, and the BC Centre of Excellence for Women's Health engages multiple partners from the academic, community, clinical and public policy sectors. This project addresses the economic costs of violence in BC and will develop and recommend a violence prevention policy framework for the province.

The results of these projects will lead to significant improvements in public policy, community awareness, field practice, and improved education for those who keep our communities safe.

JIBC Schools and Divisions also participate in ongoing research efforts exploring improvements in practice and education such as the following ongoing or recently completed research projects:

## School of Public Safety & Security

- The Effectiveness of Current Fire Fighter Rapid Intervention Teams
- Evaluation of Self Contained Breathing Apparatus
- Identification of Potential Risk Factors for Injury to Police Officers using New Technologies
- A Collaborative Approach to Ensuring the Health and Safety of Persons with Disabilities when Interacting with Law Enforcement Officers.
- · Onroad Driving Assessment of Older Adults

## **School of Community & Social Justice**

- Sexual Exploitation in Remote Aboriginal Communities
- Balancing Conflicting Interests: A Counsellor's Guide to The Legal Process (release in early 2011)
- Sexual Exploitation Toolkit: One-stop resource for information on the commercial sexual exploitation of children and youth, with a focus on BC

#### **School of Health Sciences**

- From Diagnosis to Discernment: Fostering the Development of Clinical Judgment in Recruit Paramedics in High Fidelity Simulation Environments
- Prehospital clinical performance global rating scale, Primary Care Paramedic scale validation study
- What the camera sees: video assessment in simulation settings

# **Looking Forward**

The Office of Applied Research is committed to building capacity and supporting institute-wide research training and development through establishing ethics policies, procedures and guidelines in keeping with Tri Council 'gold' standards, developing new funding proposals for grants and contracts, and ensuring that research results impact public safety curricula, interventions and public policy in meaningful ways. Over the next five years, the OAR will promote research, education, and scholarship within the strategic goals of the JIBC.

#### **Themes**

The Office of Applied Research will work with JIBC Schools and Divisions to develop three general areas of expertise:

- interdisciplinary practice
- experiential and simulation-based learning
- improving practice for those who keep our communities safe

## **Funding priorities**

JIBC researchers seek practical solutions to real world problems within the unique domains of justice and public safety and from the standpoint of the First Responder and First Receiver. This perspective informs the funding priorities of the Office of Applied Research in five areas:

- Research based in the natural sciences and engineering areas, exploring innovation in practice and safety interventions for fire, police, paramedic, and justice personnel (e.g. the Identification of Potential Risk Factors for Injury to Police Officers using New Technologies)
- Social sciences and humanities research such as the Rural Disaster Resilience Project (RDRP), which focuses on emergency planning and disaster resilience in rural, remote, and coastal communities

- Health sciences research that supports emerging roles and practice of prehospital and paramedical personnel in meeting the challenges of an evolving health care system (such as the development of Emergency Room Assistants, placing paramedics in the Emergency Department)
- Research that explores innovation in educational technology, particularly in simulation-based environments, technology-enhanced learning, and experiential learning (e.g. SIMTEC, Fostering the Development of Clinical Judgment in Recruit Paramedics in High Fidelity Simulation Environments)
- Applied research with our operational partners, small and medium-sized enterprises, and the communities they work with and in to enhance productivity and social innovation

JIBC research is intended to help keep our curricula 'state-of-the-art', to ameliorate public interventions and prevention, and to help influence evidence-informed public policy with respect to public and community safety.

## **Funding Opportunities**

The Office of Applied Research will seek funding through a wide range of sources, including peer reviewed funding agencies (e.g. Tri-council funding), private and public sector resources, partnerships, grants and contracts.

## **Recruitment and Retention of Outstanding Faculty**

The Office of Applied Research will continue to build, maintain, and retain outstanding research faculty and staff. With its complement of current faculty and staff who hold master's and doctorate degrees, along with highly qualified research associates and research partnerships with BC and Canadian universities, the JIBC currently supports a diverse and expanding series of research initiatives. In addition, OAR will focus on creating a culture of research across the JIBC through the integration of research in programs at all levels, including dedicated research courses at the professional and undergraduate levels. The Office will support individual capacity building for staff and faculty who are developing and completing research projects within their own graduate disciplines as well as support, institutional capacity building e.g. JIBC degree and post graduate level programs.

#### **Activities and Functions**

The Office of Applied Research will support its vision and plan by:

## • Fostering a Pan-Institute Culture of Applied Research

- In collaboration with JIBC Deans and Directors, identify opportunities for integrating applied research into justice and public safety curricula, innovations and public policy interventions.
- Establish and maintain pan-Institute research networks, including JIBC Applied Research Committee (ARC) and Ethics Review Committee (ERC) to ensure adherence to JIBC Applied Research Policies, Procedures, Guidelines, including adoption of national Tri Council ethics protocols.
- Provide leadership in the publication/dissemination of JIBC applied research findings and publications e.g. JIBC Annual Report, Justin Times, International Journal of Prehospital and Disaster Medicine, etc.

## • The Development and Recruitment of Faculty and Staff

- Recruit a cadre of highly skilled, knowledgeable and experienced adjunct research faculty and staff e.g. JIBC Research Associates.
- Develop applied research and scholarship opportunities for JIBC Visiting Scholars, Applied Research Chairs and Faculty.
- Ensure professional development and training opportunities for JIBC Faculty through annual research retreats, workshops, symposia to enhance knowledge and skills in research and grant proposal writing.

## Growth of Research Capacity and Operational Infrastructure

- Maintain JIBC research policies and procedures, ensuring consistency with Canadian Tri-Council funding agency guidelines and standards: Natural Sciences and Engineering Research Council (NSERC), Canadian Institutes of Health Research (CIHR) and Social Sciences and Humanities Research Council (SSHRC).
- Secure research funding, from public and private sources, for example the Canadian Foundation for Innovation.
- Promote private and public collaborations in applied research and in tandem with JIBC Office of Advancement, support engagement of the private sector in the commercialization of public safety technology.
- Create central infrastructure support and processes in support of the administrative and operational requirements of research funders, including foundations and government departments

## • Provision of support and mentorship

- Provide support to JIBC Faculty and Schools by providing consultation and support throughout all stages of the research process e.g. from research concept through to design.
- Support and mentor JIBC Faculty who are undertaking advanced and post graduate academic studies, theses, dissertations, research presentations and posters.

## **Measuring Success**

The Office of Applied Research will continue to foster research that builds towards a common goal and vision with measurable objectives. As part of its participation in the JIBC's overall Continuous Quality Assurance program and Strategic Planning process, OAR develops annual Local Operating Plans and identifies Key Performance Indicators, to ensure efficiency, effectiveness and accountability in its research activities. These indicators provide valuable measures of OAR's progress including tracking successful completion of research projects, recruitment and retention of Highly Qualified Personnel and research faculty, and participation of JIBC faculty and staff in ongoing research events, workshops, and professional development activities.

