

St. Michael's

Inspired Care. Inspiring Science.

Post Doctoral Fellowship (PDF) Program

The Canadian Brain Injury and Violence Research Team (CBIVRT), based in the Injury Prevention Research Office (IPRO), Keenan Research Centre, St. Michael's Hospital was recently funded by CIHR to explore the common modifiable risk factors of Traumatic Brain Injury (TBI) and violence with the ultimate goal to prevent TBI and violence. The CBIVRT consists of 27 co-investigators in 12 institutions across Canada (Centre for Addiction and Mental Health, Dalhousie University, Ryerson University, St. Michael's Hospital, Sunnybrook Health Sciences Centre, Toronto Rehab Institute, Toronto Western Hospital, University of Alberta, University of Ottawa, University of Toronto, and University of Waterloo, York University) and provides a number of opportunities for graduate students (Master's, PhD, MD) and Post Doctoral Fellows.

Underway are studies exploring the interrelation between TBI and violence in vulnerable groups like the homeless, perpetrators of violence, victims of unintentional injury, and in children. A number of studies explore the antecedents of TBI and violence within the culture of ice hockey and others explore these issues using analyses of large databases at a societal level. Knowledge translation studies are interwoven through the research program and members of the team will explore the translation of studies in this area to effective action aimed at lessening TBI and violence. We have partnered with a number of community organizations enabling community-based research and integrate knowledge mobilization activities.

Research methods include both qualitative and quantitative methodologies. Some studies involve in-depth interviewing, neuropsychological testing and neuro-imaging with advanced MRI techniques while others involve innovative techniques such as finite element modeling (engineering), economic analyses, and multivariate statistical methods.

The opportunity

The Post Doctoral Fellowship (PDF) Program is an intensive training program that provides opportunities both for self-directed research and interdisciplinary collaboration. Strong candidates for this program have graduate level training in one or more of the following areas: psychology, sociology, urban studies, evaluation, nursing, health and/or medical sciences, statistics, biostatistics, epidemiology, policy, economics, mathematics, computer science, spatial analysis, health services, demography, engineering, physics, or other related fields.

The PDF Program combines academic research, education and training, and professional work with progressive mentoring from a multidisciplinary group of professors and researchers. Fellows contribute directly to the program of research through their involvement in work groups, development of new methods, and managing and driving research projects to meet deliverables.

The purpose of the fellowship is to:

- Prepare fellows for future positions in academia, national health agencies, international organizations, and foundations.
- Enhance skills in designing and implementing in-depth methodological research related to traumatic brain injury (TBI) and violence.
- Develop an understanding of the current landscape, scope, and challenges of TBI and violence.
- Strengthen the ability to mentor junior researchers, including students and research personnel.
- Develop skills related to writing, obtaining, and managing grants and publishing manuscripts in peer-reviewed journals

Post Doctoral Fellows will be involved in the following activities, depending on the specific project:

<p>TBI and Violence in Vulnerable Populations</p> <ul style="list-style-type: none"> • Supervision of students/staff who will be doing these analyses of data including advanced neuro-imaging techniques • Preparation and submission of manuscripts of the study findings • Ensuring recruitment timelines are met • Screening, recruiting, and contacting potential participants • Conducting, transcribing, and analyzing interviews and questionnaires completed by participants • Delivering of neuropsychological and behavioural testing batteries and self-report questionnaires • Conducting neuroimaging analysis 	<p>Impact of TBI in Communities and Society</p> <ul style="list-style-type: none"> • Acquisition of data sets • Development & implementation of analysis plans • Database development and analysis • Quantitative analyses using SAS and SPSS • Conducting GIS based analyses and further development of a web based Injury atlas • Supervision of students/staff • Preparing of manuscripts
<p>Cultural Influences on TBI and Violence</p> <ul style="list-style-type: none"> • Conducting interviews and focus groups with young hockey players, parents, and coaches • Qualitative analysis of interview data • Conducting Content Analysis on newspaper articles and videos about hockey, violence, and brain injury • Database development and analysis • Quantitative analysis of large datasets • Supervising students who will interview, etc. • Ensure data integrity and timelines are met • Analysis of data and preparing of manuscripts 	<p>Knowledge Translation Activities</p> <ul style="list-style-type: none"> • Writing systematic reviews • Conducting evaluations and cost effectiveness studies • Develop and evaluate KT strategies • Finite Element modeling • Communications and networking with community and academic partners • Analysis of data and preparing of manuscripts • Supervision of students/staff

Expectations

Post Doctoral Fellows will be expected to complete the following in each of their focus areas:

- Lead and oversee all aspects of *at least 2* research studies (develop research questions, collect, enter and analyze quantitative and qualitative data, and prepare and submit the manuscripts)
- Co-author and submit at least 4 manuscripts per year
- Develop and submit at least 2 grant proposals per year
- Submit Research Ethics Board applications
- Supervise students, graduate and undergraduate students
- Present research findings at national and international scientific meetings
- Provide progress report every other month

Post Doctoral Fellowships are appointed for one year, with the possibility of renewal for a second year.

Funding

The fellowship is a maximum of 3 years, based on yearly renewable contract dependent on funding.

Please note that all Post Doctoral Fellow candidates are expected to apply for funding through scholarships and other sources.

Eligibility

The successful candidate will possess a Ph.D. or equivalent, earned within the last six years, in relevant health sciences or social sciences field such as brain injury, epidemiology, violence, psychology, sociology, urban studies, evaluation, nursing, health and/or medical sciences, statistics, biostatistics, policy, economics, mathematics, computer science, spatial analysis, health services, demography, engineering, physics, or other related fields. Areas of substantive expertise could include injury prevention and control, sport-related injury, traumatic brain injury, abuse, neuro-imaging, traffic/road safety, emergency medicine, social/economic determinants of health, and spatial analysis of health data.

Excellent interpersonal skills as a team player and the ability to work independently with minimal supervision are required. Ideal applicants should demonstrate strong knowledge of statistical packages (i.e. SPSS, Stata, SAS) as well as in general quantitative methods (i.e. regression, survey analysis) while understanding of more advanced statistical models (e.g. multilevel or structural equation models) is considered as an asset. Alternatively, candidates with tracking records of peer reviewed publications and giving presentations at scientific meetings are preferred.

More information about PDF positions with the Canadian Brain Injury and Violence Research Team can be found here: http://www.stmichaelshospital.com/research/tbi_violence_study.php

Application requirements

Applications for the IPRO Post Doctoral Fellowship are considered on a continual basis and must include:

1. A cover letter that includes:
 - Your full contact information (address, phone number, and e-mail).
 - The name, affiliation, and full contact information of three references.
 - The IPRO's areas of work in which you are most interested.
 - How you learned about the program.
2. Your curriculum vitae.
3. A personal statement describing your interest in the IPRO and CBIVRT, as well as your professional and academic interests and objectives. Personal statements should be 750 - 1,000 words.
4. Three sealed letters of recommendation, one of which should be from the thesis supervisor or for PDFs, mentor of current research.
5. The educational transcript from your highest degree attained. If your transcripts are not in English, please also provide a listing of all coursework with grade and credit hour information.
6. An English reprint of your most significant publication or research paper.
7. Proof of proficiency in English for candidates whose native language is not English.
 - Candidates who have completed a degree wholly in English can provide a copy of their degree. All other candidates should send a copy of their scores on an approved English language test, specifically:
 - The Princeton Test of English as a Foreign Language (TOEFL): For the paper based test, minimum overall score of 600, including a minimum score of 5.0 in the test of written English; for the computer based test, minimum overall score of 250, including a minimum score of 5.0 in the test of written English; for the Internet based test, a minimum overall score of 100, including a minimum score of 24 in the test of written English.
 - The British Council International English Language Testing System (IELTS): A minimum score of 7.0 overall, including a minimum score of 7.0 in the written component.
8. Please note: preference will be given to those candidates who show evidence of secured stipend support for the duration of the PDF Program.

Applications can be mailed to:

Dr. Michael D. Cusimano
c/o Injury Prevention Research Office
St. Michael's Hospital
30 Bond Street
Toronto, ON
M5B 1W8

CVs/resumes and personal statements may be e-mailed to injuryprevention@smh.ca. Please also cc Topolovec-VranicJ@smh.ca. More information about the CBIVRT and a list of the team's co-investigators can be found at http://www.stmichaelshospital.com/research/tbi_violence_study.php