

RESEARCH SCHOLAR PROGRAM 2017
SUPERVISOR/PROJECT INFORMATION FORM



Due on or before **October 21 2016**. Forms received after this date will not be posted on the website.

SUPERVISOR INFORMATION

Supervisor Name: Sander L. Hitzig

Mailing Address: St. John's Rehab, 285 Cummer Avenue, Room B105, Toronto, ON M2M 2G1

Telephone Number: 416-226-6780 ext. 7177

Email Address: sander.hitzig@sunnybrook.ca

Degree (MD, PhD, MD/PhD): PhD

Academic Rank: Assistant Professor

Field of Research: Rehabilitation, Trauma, Quality of Life, Community Participation, Aging, Pain

Graduate School Appointment (IMS, IHPME etc.): University of Toronto, Rehabilitation Sciences Institute

Please note that you must be appointed to the SGS in order to be a supervisor in the Scholar Program

Research Institute Affiliation (if applicable): Sunnybrook Research Institute

Allocation of student contact time (# of hours per week you are available to the student for any concerns or to review progress): 1.5 hours per week

Do you have a student that you have already agreed to work with? No.

Please note, you may go ahead with a self-initiated project with a student of your choosing. If you choose this option, your project will not be posted online, meaning it will not be open to student applicants.

PROJECT INFORMATION

Project Title: What happens after major trauma and amputation? Advancing knowledge on the characteristics and outcomes of under-studied rehabilitation populations.

Project Description (max 500 words):

The proposed research aims to better understand the challenges associated with an acquired disability arising from lower limb amputation (LLA) and trauma-acquired disability, which are both under-researched rehabilitation populations. In terms of trauma, a significant proportion of survivors will incur a partial or permanent disability but little attention has been paid to their long-term outcomes. Although Canadian data is lacking, recent findings from the U.S. found an excessive mortality rate following discharge for trauma in their sample: 16% of all discharged injured patients dying in the 3 years following injury and 9.9% in the first year. Similarly, there are an estimated 1,500 Ontarians with diabetes who had a limb amputated in 2008; with 51% of those with a first amputation in 2006 who had a second limb amputated by 2011. Rates of survival following LLA are quite low, with rates as low as 30-days post-amputation to as high as 5 years. Both LLA and trauma populations face numerous challenges (e.g., psychosocial issues, poor body image, chronic pain); however data on community outcomes is nearly non-existent.

In order to obtain evidence to support the physical, mental and social needs of these under-researched disability groups, a series of chart reviews of former St. John's Rehab patients will be undertaken to address the following questions:

- a) What are the clinical characteristics and rehabilitation outcomes of vascular and trauma lower-limb amputees under the age of 65?;
- b) What are the similarities and differences between the clinical pathways of older trauma patients (65 years +) versus younger trauma patients?; and
- c) What are the outcomes of trauma patients with psychological issues (e.g., posttraumatic stress disorder).

To address these issues, a chart review will be undertaken to extract key clinical characteristics of these patient populations (e.g., sex, age, diagnosis, secondary complications, injury severity score, prosthesis or other mobility device, etc.), rehabilitation processes/procedures (e.g., length of stay; psychological treatments, prescribed pain medications, functional independence measure scores, etc.), and rehabilitation and/or community outcomes (e.g., rehabilitation efficiency, presence of pain, return-to-work, discharge destination [home, long-term care, etc.], etc.). The inclusion criteria will be former St. John's Rehab patients with trauma or vascular-related LLA

Approximately 100 patient charts will be reviewed to extract the data. Descriptive statistics and inferential statistics (e.g., chi-square, t-tests) will be utilized to describe the characteristics and/or compare outcomes between various groups. The findings from this work will provide much needed evidence to better understand what are the challenges being faced by these patient groups, and can inform rehabilitation care on what is required to improve the health and quality of life of persons living with LLA and trauma-acquired disability in the community.

If human subjects are involved, has Ethics been obtained?

☐ YES

☒ NO

☐ Application Submitted

☐ N/A

Do you expect this work will be published within 20 months?

☒ YES

☐ NO

☐ Uncertain

Student's Roles / Responsibilities (Please be as specific as possible) Please indicate who will serve as the student's direct report. (PI, PDF, PhD student, technician etc...):

The student will be responsible for supporting the preparation of a research ethics board application to Sunnybrook Health Sciences Centre to undertake the chart review, be responsible for reviewing approximately 100 charts (with support from a Sunnybrook research volunteer) at St. John's Rehab Hospital (on-site) and extracting data, supporting literature reviews and data analysis, and writing a manuscript for publication. The goal is to have at least 3-4 manuscripts be produced from this activity, with the student being the lead author on one of these papers and a co-author on the others. Dr. Sander Hitzig will serve as the primary supervisor to the student and will be available to provide guidance and support on the proposed research. In addition, two academic Psychiatrists (Physical Medicine & Rehabilitation [PM&R] Medicine doctors) working at St. John's Rehab, Drs. Amanda Mayo and Ed Hanada, will be co-supervising the student with Dr. Hitzig, and who will be available to provide guidance on the chart extraction review process. In addition, the student may be offered opportunities to learn more about PM&R practice at St. John's Rehab. The student will be provided a dedicated space at St. John's Rehab Hospital to undertake the research, which includes a workstation.