Comprehensive Research Experience for Medical Students (CREMS)
2022 Supervisor and Project Information Form

Please complete and return via email ONLY to crems.programs@utoronto.ca by February 18, 2022.

Supervisor Information
NOTE: CREMS will not support pre-determined pairings of students and supervisors. Supervisors must agree to open their projects to all students and interview all that are interested.

Name: Dr. Christine Lay
Email: Christine.Lay@wchospital.ca

Department: Medicine, Division of Neurology
Hospital/Research Institution: Women’s College Hospital, Women’s College Research Institute

SGS Department(s) (if applicable): n/a

ORCID ID (see https://orcid.org/ - If you do not have an ORCID ID we encourage you to sign up for one):
https://orcid.org

Location of Work:
Centre for Headache, Women’s College Hospital

Field of Research (up to 4 keywords):
Neurology, Headache, Education

Student contact time (number of hours per week YOU are available to the student for any concerns or to review progress):
Scheduled meetings: 2 hours per week; informal meetings as required.
**Project Information**

*NOTE: If this project is selected, this information will be posted on CREMS website for interested student applicants to view research opportunities.*

**PROJECT TITLE:**
Innovative education directives for the management of headaches

**PROJECT DESCRIPTION:**
Including background, aim(s), method(s) and significance of the project. *Maximum 300 words.*

**Background/Aims:**
Headache and migraine are disabling conditions that diminish quality of life, decrease work productivity and limit social functioning. Due to the significant social and economic burden, there is a need to improve migraine management in order to provide appropriate care to patients suffering from the condition. WCH’s Centre for Headache developed an educational program to improve migraine knowledge and self-care skills in patients currently on waitlist for an appointment. By actively managing their migraines, outcomes can be improved and patients may be moved off the waitlist. Our project aims to determine the clinical effectiveness of a virtual headache education intervention and effectiveness of a newly developed headache action plan (TRALI-HAP) in migraine patients.

**Methods:**
This randomized controlled educational intervention will be trialed in migraine patients currently on a waitlist to be seen for their initial assessment. One arm will receive virtual education intervention 3-months prior to their initial assessment and the other/control arm will receive education following initial assessment. Primary outcome is an improvement of their Migraine Disability Assessment score from baseline to initial assessment. During headache education, participants will be informed on how to use TRALI-HAP, and its effectiveness for treatment of migraines will be evaluated prospectively. Baseline data will be collected online (REDCap) or by phone prior to the participant’s initial assessment. Clinical outcome measures will be collected at the initial assessment for both arms, and again 4-weeks after their initial assessment.

**Significance:**
Headache is one of the leading causes of disability in adults worldwide. Educating patients on how to manage their condition can lead to improved self-efficacy, overall patient outcomes and satisfaction. The findings of our work will help validate an education program and its ability to aid in effective patient management of migraine, and inform best practices.

**Is this project remote-capable (in case of new restrictions) or have an alternative remote option?**
- ☒ Yes, remote capable
- ☐ No
- ☒ Yes, alternate remote option. Please specify (100 words max): The decision about where the project occurs (remote or in clinic) will be decided by the supervisor based on the policies in place at Women’s College Hospital during the time of the placement. The study design allows it to be carried out remotely, the student will also have access to a desk and computer on site at Women’s College Hospital.

**If human subjects are involved, have the appropriate Research Ethics Board approvals been obtained?**
- ☒ Yes
- ☐ No
- ☐ Not Applicable
If yes, please list the application submission date:

Do you expect this work will be published?
☒ Yes ☐ No ☐ Uncertain / Other
Research Environment and Student Roles and Responsibilities

Please be specific as possible. Please describe the research environment, including availability of required facilities/equipment/expertise, supervisor’s experience and mentorship plans. Please clearly outline the student role(s) and responsibilities related to the project, potential educational value, and indicate who will serve as the student’s direct report for daily oversight (PI, PHD student, technician, etc.). Maximum 300 words.

- The student will be responsible for developing presentations and materials for the headache education program, and assisting with recruitment and data collection, managing the flow of participants through each stage of the project. They will be provided training and mentorship by Dr. Lay and collaborators, and supported by a Research Associate.
- The student will also assist with data analyses, synthesis, and provide feedback on the headache education and participant satisfaction.
- They will be responsible for developing an abstract that has the chance to be presented at local and national headache/neurology conferences, and contribute to a manuscript that will be submitted for peer-reviewed publication.
- In addition, depending on the student’s interest and capacity, they will have an opportunity to engage in other clinical research projects carried out at Women’s College Hospital’s Centre for Headache.
- The student will have full access to the resources of WCH Academics, which guarantees all its appointed scientists and research staff a wide range of resources necessary for running a program of research. WCH will provide the student with a furnished and well-equipped office, as well as access to meeting rooms, conference facilities, and team rooms. Students and research teams will have direct access to other researchers, support staff, and operational resources.