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. Jodi Shapiro
Co-Investigators: Dr. Lindsay Shirreff, Dr. Ally Murji

**Email:**
Jodi.shapiro@sinaihealth.ca

**Department:**
Obstetrics and Gynaecology

**Hospital/Research Institution:**
Mount Sinai Hospital

**SGS Department(s) (if applicable):**
Click or tap here to enter text.

**ORCID ID** (see [https://orcid.org/](https://orcid.org/) - If you do not have an ORCID ID we encourage you to sign up for one):
https://orcid.org/0000-0001-6854-0888

**Location of Work:**
Mount Sinai Hospital

**Field of Research (up to 4 keywords):**
quality improvement, surgical gynaecology, surgical outcomes

**Student contact time** (number of hours per week YOU are available to the student for any concerns or to review progress):
A minimum of 6 hours per week.
NOTE: If this project is selected, this information will be posted on CREMS website for interested student applicants to view research opportunities.

PROJECT TITLE:
Improving surgical consent communication: Implementation and evaluation of a personalized risk communication tool for elective hysterectomy

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

**Background:** Hysterectomy is the most common surgery performed in gynecology and is an effective management option for a number of benign gynecologic conditions. Although it is generally regarded as a safe procedure, operative complications may occur. In 2016, we created an online scorecard for hysterectomy procedures, which is now distributed biannually to 9 Canadian hospitals with approximately 5500 hysterectomies in our retrospective database. We have developed a web-based personalized risk calculator to improve the quality of surgeon-patient communication during the surgical consent process. Our model and its explanation can be found on our Gynaecology Quality Improvement Collaboration website (www.gynqi.com).

**Study Objectives:** To determine impact of complication prediction tool on patient knowledge of complication risk, satisfaction with hysterectomy consent visit, anxiety related to surgery and overall satisfaction with consent episode of care.

**Methods:** We will complete a pilot evaluation using a prospective before-after design. In the standard care (before) phase, typical preoperative counselling and consent visits prior to hysterectomy will be completed in three Sinai Health System (SHS) surgeons’ offices for 25 patients. Following the standard consent process, the CREMS student will telephone patients to administer a survey assessing knowledge of surgical risk, anxiety related to surgery and overall patient satisfaction with the consent episode of care. We will also document length of the encounter using EMR. In the intervention (after) phase, surgeons will use the prediction tool to counsel patients (n=25) on their personalized risk of complications based on preoperative information inputted into the online clinical prediction tool. Patients will be given a handout of their personalized risk assessment and will be directed to the online website for further information about their hysterectomy. The same telephone survey assessing knowledge, anxiety and patient satisfaction will be administered to a group of 25 patients. Data will be reported descriptively and comparisons will be made using \( \chi^2 \) tests, two-tailed \( t \) tests, or Mann-Whitney tests for categorical and continuous variables, as appropriate.

It is anticipated that this tool and its evaluation will improve surgeon communication of risk and perception of performance. Our project is innovative and will improve the accuracy of physician counselling and make robust improvements to patient care with respect to preoperative expectation-setting.

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): Click or tap here to enter text.

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 CREMS student will be welcomed to our team this summer. We have a full time Research Assistant and Research Coordinator who will assist with orientation and onboarding of the student on the relevant REB applications and projects. The student can work virtually or in an office at Mount Sinai Hospital. Due to COVID-19, our two previous students have worked virtually. This was done seamlessly and students had regular check-in and progress meetings on Mondays and Fridays with email and phone communication in between.

For the aforementioned project, the student will assist with data collection, data analysis and manuscript preparation. The student will be mentored through all stages of the process. We also view this program as an opportunity to mentor students who may be interested in pursuing Obstetrics and Gynaecology as a career choice. In the past, our partnership with students has extended beyond the summer months and most have come back to complete clinical electives during their final year of medical school.

There are several other sub-studies being conduction through the Surgical Gynaecology Scorecard Project. The CREMS student will primarily assist in data analysis and manuscript preparation for the aforementioned project. However, he/she/they will have the opportunity to become involved in one other study of their choice based on clinical interest. This will be determined at the start of the summer placement. Furthermore, we have recently launched the Gynaecology Quality Improvement Collaboration website (www.gynqi.com). There will be opportunity, this summer, for the student to develop content and implement knowledge translation strategies.