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:**
Heather Millar

**Email:**
heather.millar@utoronto.ca

**Department:**
Obstetrics and Gynaecology

**Hospital/Research Institution:**
Women’s College Hospital

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

**ORCID ID** *(see https://orcid.org/ - If you do not have an ORCID ID we encourage you to sign up for one):*
0000-0003-2883-6603

**Location of Work:**
Women’s College Hospital, Mount Sinai Hospital, virtual access to EMR

**Field of Research (up to 4 keywords):**
family planning, termination of pregnancy, dilatation and evacuation, high risk pregnancy

**Student contact time** *(number of hours per week YOU are available to the student for any concerns or to review progress):*
Weekly 2hour group meeting, 1 hour one-on-one mtg, available by text/phone/email throughout week and for ad-hoc additional meetings as required by project activities
NOTE: If this project is selected, this information will be posted on CREMS website for interested student applicants to view research opportunities.

PROJECT TITLE:
Retrospective review of 2nd trimester surgical termination of pregnancy in patients with maternal or fetal medical conditions at a tertiary hospital over the past ten years.

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

According to the Society of Obstetricians and Gynaecologists of Canada clinical practice guidelines, dilatation and evacuation (D&E) is the preferred intervention for second trimester termination of pregnancy (TOP) at greater than 13 weeks gestation. However, the majority of retrospective data on the outcomes of such procedures focus on outpatient settings, with exclusion of patients with maternal medical conditions or fetal diagnoses. In particular, there is minimal data on the growing high-risk D&E population of women with cardiovascular disease. The SOGC emphasizes the need for skilled obstetricians and multidisciplinary teams in the case of complex D&E procedures to ensure safe provision of this essential service.

The TOP program at Mt.Sinai Hospital is focused on providing D&E procedures in these more complex circumstances for women with maternal comorbidities and/or fetal diagnoses. Alongside skilled obstetricians, other specialists such as anesthesiologists, cardiologists, etc. are involved throughout the stages of care during this procedure. Over the past decade, the Mt. Sinai program has conducted approximately 1000 2nd trimester D&E procedures on such patients. This project will involve performing a retrospective analysis of these procedures to assess: peri-operative complications, short and medium-term health outcomes (particularly for more medically complex patients), and impact on future pregnancy outcomes, with a particular focus on risk of preterm birth. Given the large sample size and the unique patient population, a retrospective analysis of the surgical TOP and D&E procedures conducted at Mt. Sinai Hospital will fill major gaps in literature and thus provide evidence to support safe provision of 2nd trimester D&E in more complex circumstances.

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?
**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.**

I am an ObGyn with additional fellowship training in Global Women’s Health and Equity and Paediatric and Adolescent Gynaecology, who is part of the surgical 2nd trimester termination of pregnancy program at Women’s College and Mount Sinai Hospital. I have supervised and worked with students both in my clinical roles (with excellent teaching evaluations) and through CREMS (as a joint supervisor for students travelling to Kenya through international CREMS and as a supervisor to a CREMS student last summer at SickKids Hospital). I am accustomed to the program and committed to providing an enriching experience to students. This project will be completed under our family planning and global health faculty group. I will be the direct contact for the student but they will have support and regular interactions/mentorship from our whole group (GH faculty: 4, FP faculty: 6-7).

The project will involve data extraction from the EMR, which is available remotely. The REB application has already been submitted and we expect this will be approved before the student starts. The project will involve data collection, data analysis (to be supported by myself and statistical support provided by our department), and manuscript preparation. As part of our group’s trainee (medical student and resident) summer research activities, we provide a weekly group “meeting” where we discuss projects and participate in journal club review on topics of family planning and global health. In addition, I will conduct regular meetings separate to this to support this specific project. If COVID trainee protocols change and project timelines allow, I will also arrange for in person clinical shadowing experiences related to family planning. I am easily available through email/text/phone and for ad hoc meetings to support a student.