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: Colleen McDermott
Email: Colleen.mcdermott@utoronto.ca

Department: OB/Gyn
Hospital/Research Institution: Mount Sinai Hospital

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/0000-0002-9588-6574

Location of Work:
Mount Sinai Hospital

Field of Research (up to 4 keywords):
Urogynecology, menopause, pelvic organ prolapse, incontinence

Student contact time (number of hours per week YOU are available to the student for any concerns or to review progress):
Can contact anytime, day or night. Student meetings will usually take place at the end of the day ~4pm
**PROJECT TITLE:**
The Visual Assessment of Vaginal Atrophy (VAVA) Study: A correlation study between the visual assessment and objective measures of vaginal atrophy (REB at MSH: #21-0178-E, Oct 26, 2021)

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

**Background:** Genitourinary syndrome of menopause (GSM) is a very prevalent vulvovaginal, sexual, and lower urinary tract condition after menopause. Patients with GSM can have significant symptoms of vaginal atrophy (VA) including vaginal pain, irritation, burning, dryness, pruritus, and dyspareunia. On vaginal exam there can be significant changes in the urogenital epithelium including decreased lubrication, change in colour, loss of rugation, vaginal stenosis, and vaginal abrasions/lacerations. The vaginal maturation index (VMI) is an objective assessment of VA using a vaginal smear. This is an inexpensive way to evaluate hormonal influences on the epithelium.

**Aim:** The primary objective of this study is to determine the simplest, most reliable method of grading VA in postmenopausal women. We will determine if a simple global assessment versus a detailed visual scorecard of VA correlate and are suitable predictors of VA as assessed by the VMI.

**Methods:** This is a prospective cohort study of postmenopausal women that present to the Urogynecology clinics of Mount Sinai Hospital. We have already developed and validated a visual scorecard of VA. The clinical part of the study has already began whereby patients complete the Urogenital Atrophy Questionnaire to assess symptoms of GSM and then undergo a pelvic exam. One investigator then completes a global assessment of VA and a detailed visual scorecard assessing various characteristics. The physician then does a vaginal smear (for VMI quantification) and vaginal pH. A second investigator, blinded to the first part, then repeats the global assessment and detailed visual scorecard of VA.

**Significance:** Visually evaluating VA is a crucial step when assessing menopausal women. A study developing a standardized tool to grade VA is necessary to minimize the subjectivity in completing a vaginal assessment. This tool will provide clinicians with a framework to diagnose and grade atrophy, and more accurately recommend treatment for patients.

**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.

This is a prospective cohort study of postmenopausal women is taking place at the urogynecology clinic at Mount Sinai Hospital. If on site experience is allowed, the student will assist with patient recruitment, informed consent discussion, enrollment, and data collection. If off-site experience is the only option, the student will be responsible for creating a database and inputting all data collected as of June 2022. We expect data collection on 60-70 patients by that point and each patient has multiple data sheets that will need inputting. Once data collection is complete we expect the student to assist with statistical and manuscript preparation as well. Both Dr. McDermott and Dr. Jacobson have significant research and mentor experience. This is a tremendous opportunity for a student to learn about prospective clinical research as well as manuscript preparation. Dr McDermott has had several CREMS students over the last 5 years and will be the student’s direct report for daily research activity.