Supervisor/Project Information Form
Due February 6, 2020 by email to crems.programs@utoronto.ca

Supervisor Name: Mara Sobel & Crystal Chan

Project Title: A prospective comparison of ultrasonographic features of adenomyosis with histologic diagnosis

Hospital/Research Institution: Mount Sinai Hospital/Women’s College Hospital

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Field of Research (2 keywords): Gynaecology, Radiology

Department: Obstetrics and Gynaecology

School of Graduate Studies Appointment (IMS, LMP, IHPME etc)? Yes/No: NO____ If YES, please name:

Brief Project Description (<300 words): Adenomyosis is a benign disorder of the uterus characterized by the presence of endometrial glands and stroma within the myometrium. Symptoms include abnormal uterine bleeding, pelvic pain, and infertility. The gold standard diagnostic test for adenomyosis is histologic assessment of myometrial tissue obtained by hysterectomy. More recently, transvaginal ultrasound (TVUS) has proved useful in diagnosis of adenomyosis. There is no agreement on how specific TVUS features should be used in the diagnosis of adenomyosis; these features are often not reported on routine TVUS. A proposed standardized TVUS reporting system for adenomyosis was recently published using the Morphological Uterus Sonographic Assessment (MUSA) terminology for myometrial lesions. While this reporting system has been proposed by expert consensus, it has not been validated against histology nor associated with symptoms. Going forward, validating the MUSA criteria will improve detection of adenomyosis, inform clinical decisions, and provide homogeneity across research studies. It may also lead to the development of a clinical scoring system that will better aid targeted treatment strategies for adenomyosis. This pilot prospective cohort study aims to determine the feasibility of a large-scale validation study that compares MUSA TVUS criteria to histological diagnosis of adenomyosis. Study objectives include: (1) determining enrollment
rate (2) comparing MUSA TVUS criteria to histologic diagnosis, (3) correlating the number and extent of MUSA TVUS features of adenomyosis to patient symptoms. Students will be involved in recruiting and consenting patients from gynecologists offices at MSH. They will participate in data collection and analysis from patient surveys and ultrasound reports. They will review charts for patients that have completed their hysterectomy. They will have the opportunities to observe hysterectomies and histologic assessment at Mount Sinai Hospital or Women’s College Hospital. They will have the opportunity to observe ultrasounds being performed at True North Imaging.