Supervisor Name: Dr. Mara Sobel, Dr. Ari Sanders (Clinical Fellow), Dr. Michael Chaikof (3rd year OB/GYN resident)

Hospital/Research Institution: Mount Sinai Hospital

Email: mara.sobel@sinahealthsystem.ca; michael.chaikof@mail.utoronto.ca

Field of Research (2 keywords): Obstetrics, Gynecologic Surgery

Department: Obstetrics and Gynecology

School of Graduate Studies Appointment (IMS, LMP, IHPME etc)? Yes/No: No

Project Title: The “PICS” trial – Preventing Isthmocele after Cesarean Section

Brief Project Description (~300 words):

Cesarean section accounts for nearly 30% of births in Canada and is the most commonly performed surgery by OBGNs. Cesarean scar isthmocele, meaning a defect in the uterine wall at the site of a previous uterine incision, is a common complication of this surgery. Isthmoceles can lead to major complications in pregnancy (uterine rupture, invasive placentation, cesarean scar ectopic pregnancy) and outside of pregnancy (abnormal uterine bleeding, infertility and pain). Studies have shown that the method used to suture the uterus at the time of a cesarean section may have an impact on the incidence of post-operative isthmocele formation. Our study is a randomized control trial of the impact of locked vs unlocked c-section uterine closure on the incidence of isthmocele formation. Women undergoing c-section will be randomized to have either a locked or unlocked uterine closure. They will then return 6 months after their surgery for a transvaginal ultrasound to evaluate the presence or absence of isthmocele. We also hope to determine if these uterine closure techniques lead to differences in surgical time, blood loss or the need for blood transfusions after surgery.

The CREMS student will play a fundamental role in our study. They will help educate pregnant patients about isthmocele and recruit them to our study. They will also attend cesarean sections to help with randomization and to collect data about the patients and their surgical outcomes. They will then be responsible for following up with these patients and helping to organize their return for transvaginal ultrasound.

The student will have the opportunity to participate in important women’s health research and learn about OBGN, surgical techniques, research methodology and patient education. They will also have the opportunity to be a named author on one or more publications.