



RESEARCH SCHOLAR PROGRAM – 2018 SUPERVISOR & PROJECT INFORMATION FORM

Please complete and return, via email only (crems.programs@utoronto.ca) by **November 3rd 2017** (forms received after this date will not be posted).

Supervisor Information

Name: Rohan D'Souza

Email: Rohan.DSouza@sinaihealthsystem.ca

Degree: MD, MSc, MRCOG, FCPS, DNB, DGO, DFP

SGS Appointment (IMS, IHPME, LMP etc.): IMS (pending)

Academic Rank: Assistant Professor

Field of Research: Obstetrics, Maternal and Fetal Medicine

Research Institution Affiliation (if applicable):

Mount Sinai Hospital, University of Toronto.

Allocation of student contact time (number of hours per week YOU are available to the student for any concerns or to review progress):

4 hours/week

Project Information

Title: Understanding the attitudes of pregnant women and healthcare providers to induction of labour

Description (max 500 words):

Induction of labour (IOL), a common obstetric intervention that precedes 20-40% of all births, refers to the artificial initiation of labour undertaken when the benefits of delivery are deemed to outweigh the risk of awaiting the spontaneous onset of labour. Unfortunately, one-fifth of IOLs fail to result in vaginal births, requiring emergency caesarean deliveries often after arduous labours, resulting in adverse emotional, clinical and cost implications. We have derived and (internally) validated a tool for predicting the success of IOL, based on variables readily available to healthcare providers in any setting. Over the next year, we will have externally validated this tool and created a mobile phone application that would allow healthcare providers to inform patients requiring IOL, of their chances of a having successful vaginal delivery.

Prior to making the tool available widely, it is important to learn the attitudes of pregnant women and healthcare providers from diverse healthcare settings, to the use of this tool and the information it will provide. We acknowledge that attitudes of pregnant women would depend on their medical history, prior experience of labour and/or IOL, as well as cultural and social influences. Similarly, those of healthcare providers would be influenced by their subspecialty, training, number of IOLs performed, clinical settings and experience, among other factors. In order to obtain as wide a representation of participants as possible, we have chosen to use social media (including but not limited to Facebook groups, twitter, and mother-and-baby blogs/forums), as well as to formally approach various international obstetric, midwifery, family practice, and nursing regulatory bodies to complete a 10-minute web-based survey that involves a brief video and a few demographic questions in addition to answering the main study question. The purpose of this study is to determine:

- 1) The acceptability of pregnant women and healthcare providers, of using a tool in the form of a validated mobile phone application to predict the success of IOL
- 2) The threshold of success below which pregnant women would **choose** an elective caesarean delivery over IOL
- 3) The threshold of success below which health care providers (obstetricians, maternal-fetal physicians, obstetric nurses, midwives and family doctors) would **recommend** an elective caesarean over IOL
- 4) Variations in responses between health care providers and pregnant women, stratified by geographical region, clinical settings and prior experiences.

With the proven safety of IOL, and as indications for IOL increase, it is anticipated that up to 50% of all pregnant women might require IOL. The results of this study are expected to influence health care delivery by:

1. Helping us understand patients' and health care providers' perspectives on a successful IOL as well as the factors responsible for variations in responses.
2. Giving us an idea of the risks pregnant women are willing to take to ensure a vaginal birth and avoid a caesarean delivery, which in turn will help with shared decision-making where health care providers and patients explore options together by sharing best evidence and informed preferences

If human subjects are involved, have Ethics been obtained? Minor revisions to the application have been submitted. Approval is anticipated before the end of November 2017.

YES NO Application Submitted N/A

Do you expect this work will be published within the 20 months?

YES NO Uncertain

Student's roles and responsibilities (please be specific)

Please indicate who will serve as the student's direct report (PI, PhD student, technician etc...)

The student will complete standard research training required (TCPS2 Core, GCP & RCR) and gain first-hand experience with the entire research process, including: data gathering, data entry, analysis, manuscript writing and conference presentations. In addition, the student will become familiar with the use of social media for conducting research, a methodology with emerging relevance. This will include engaging with social media group administrators, international regulatory bodies and participants. Finally, she/he will work with a team of clinician-investigators, clinicians, statisticians, research coordinators/ assistants and other medical students working on similar projects related to IOL and will be supervised primarily by Dr. Rohan D'Souza.