



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: Dr. Anne S. Bassett

Email: anne.bassett@utoronto.ca

Degree: MD, FRCPC

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

Academic Rank: Professor

Field of Research: Genetics; Complex disease

Research Institution Affiliation (if applicable):

Campbell Family Mental Health Research Institute
Toronto General Research Institute

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

Project Information

Title: **Identifying genetic and clinical predictors for congenital cardiac and other common diseases**

Description (max 500 words):

There is a large genetic component to risk for developmental conditions, including congenital heart disease and psychiatric disorders. We study adult patients with multi-system disease and with extensive clinical and molecular genetic assessments. Working at the University Health Network and Centre for Addiction and Mental Health, and with local and international collaborators, our patient populations and extensive data offer the opportunity to discover insights into the long-term outcomes of patients with different genetic variations and syndromes. Resources include next generation DNA sequencing data, comprehensive and long-term outcome data, and patient populations with tetralogy of Fallot, other congenital heart diseases, and with schizophrenia. These clinical and statistical/bioinformatics based research results have the potential to be immediately translated into clinical practice and have public health implications.

If human subjects are involved, have Ethics been obtained?

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 have the opportunity to participate in an academic clinic that sees patients with diverse manifestations of genetic syndromes and formulate a feasible research question of interest within the framework of our existing patient populations and data resources. Suggested topics include identifying prenatal and obstetrical risk factors related to developmental disorders of the heart or brain, delineating the variable expression of heart disease longitudinally in genetic subtypes of tetralogy of Fallot, and studying genetic pathways to abnormal cardiac or brain development and functioning . Responsibilities will include designing the specific details of the project, coordinating data collection and analysis, presenting results at local and/or international venues, and writing a manuscript suitable for publication in a peer-reviewed medical journal. Students may have the opportunity to interact with patients in a clinical context, and to hone assessment and related skills. The student will report directly to the PI who provides substantial mentorship and guidance. Collaborators and senior students and fellows are also available to the student.