

RESEARCH SCHOLAR PROGRAM 2017
SUPERVISOR/PROJECT INFORMATION FORM



Due on or before **October 21 2016**. Forms received after this date will not be posted on the website.

SUPERVISOR INFORMATION

Supervisor Name: Anne S. Bassett

Mailing Address: 33 Russell Street, Main Building, 1/F, Toronto, ON M5S 2S1

Telephone Number: 416-535-8501 x32734

Email Address: anne.bassett@utoronto.ca

Degree (MD, PhD, MD/PhD): MD

Academic Rank: Professor

Field of Research: Genetics; Complex disease

Graduate School Appointment (IMS, IHPME etc.): IMS

Please note that you must be appointed to the SGS in order to be a supervisor in the Scholar Program

Research Institute Affiliation (if applicable):

Campbell Family Mental Health Research Institute

Toronto General Research Institute

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

Do you have a student that you have already agreed to work with? No

Please note, you may go ahead with a self-initiated project with a student of your choosing. If you choose this option, your project will not be posted online, meaning it will not be open to student applicants.

PROJECT INFORMATION

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

Project Description (max 500 words):

There is a large genetic component to risk for developmental conditions, including those involving the heart and the brain. The identification of clinical and genetic markers for these diseases would allow earlier diagnosis and development of more effective treatment and potentially preventive strategies. We study human genetic models that significantly increase the power to identify such markers. Working at the University Health Network and Centre for Addiction and Mental Health, and with colleagues at The Centre for Applied Genomics (SickKids), our patient populations and extensive genetic and clinical data offer the opportunity to discover new pathways to fundamental disease mechanisms. Resources include next generation DNA sequencing data, comprehensive clinical and imaging data, longterm outcome data, and patient populations with tetralogy of Fallot and other congenital cardiac diseases, including those with specific genetic subtypes. 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, has Ethics been obtained?

☒ YES

☐ NO

☐ Application Submitted

☐ N/A

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

☒ YES

☐ NO

☐ Uncertain

Student's Roles / Responsibilities (Please be as specific as possible) Please indicate who will serve as the student's direct report. (PI, PDF, PhD student, technician etc...):

The student will have the opportunity to formulate a research question of interest within the framework of our existing patient populations and data resources. Suggested topics include identifying prenatal and obstetrical risk factors for severe congenital heart disease, delineating the variable expression of heart disease longitudinally in genetic subtypes of tetralogy of Fallot, and studying genetic pathways to abnormal cardiac development. Responsibilities will include designing the specific details of the project, coordinating the 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 graduate students are also available to the student.