

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: Minna Woo

Mailing Address: MaRS Centre, TMDT Building, 101 College St, 10th Floor, Room 10-363, Toronto, ON M5G 1L7

Telephone Number: 416 581 7531

Email Address: mwoo@uhnresearch.ca

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

Academic Rank: Professor

Field of Research: diabetes mellitus, metabolism, atherosclerosis, cancer, and signal transduction

Graduate School Appointment (IMS, IHPME etc.): Yes; IMS, Immunology, Medical Biophysics

*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): Toronto General Research Institute, UHN

Allocation of student contact time (# of hours per week you are available to the student for any concerns or to review progress): 1-3 hrs per wk

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: **Elucidating molecular pathogenesis of diabetes mellitus and related diseases including atherosclerosis and cancer**

Project Description (max 500 words):

The major research focus in the Woo laboratory is to elucidate molecular mechanisms that determine pathogenesis of insulin resistance and type 2 diabetes, which are well known to increase the risk of cardiovascular disease and cancer. The students will be carrying independent projects with initial close supervision from our senior lab members. The projects mostly utilize mouse models, employing tissue-specific genetically engineered mice with a variety of genes that are involved in the important signaling pathways that are hypothesized to be critical in diabetes and obesity pathogenesis. The students will be involved in characterizing the mice and their metabolic profiles in addition to mechanistic and molecular work in the various tissues and cell lines. For more information please visit <http://www.uhnresearch.ca/researchers/profile.php?lookup=6612>

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 students will be carrying an independent project with initial close supervision from our senior lab members. The project will mostly utilize mouse models, employing tissue-specific genetically engineered mice one of the critical genes that are involved in the important signaling pathways that are hypothesized to be essential in diabetes and obesity pathogenesis. The students will be involved in characterizing the mice and their metabolic profiles in addition to mechanistic and molecular work in the various tissues and cell lines. Student will be exposed to a variety of techniques and analytical skills which will be widely applicable for their future career in medical research. The student will have regular weekly meetings with the supervisor to discuss his/her data and immediate and long term research plans.