Comprehensive Research Experience for Medical Students
Summer Research Program 2020

Supervisor/Project Information Form

Due February 6, 2020 by email to crems.programs@utoronto.ca

Supervisor Name: Dr. Geoffrey Liu, MD FRCPC, (Medical Oncology) David Goldstein, MD FRCSC (Otolaryngologic Oncology), Andrew Hope MD FRCPC (Radiation Oncology)

Project Title: Evaluating Treatment Toxicities in Cancer Patients Treated with Cisplatin Chemotherapy using Patient-Assisted Technologies

Hospital/Research Institution: Princess Margaret Cancer Centre/University Health Network

Email: geoffrey.liu@uhn.ca

Field of Research (2 keywords): Oncology Toxicities, Implementation

Department: Departments of Medicine, Otolaryngology, and Radiation Oncology.

School of Graduate Studies Appointment (IMS, LMP, IHPME etc)? Yes: ___ If YES, please name: IMS, DLSPH, Medical Biophysics, Pharmacology and Toxicology

Brief Project Description (<300 words):
This project for the person with serious interest in oncology and clinical research. The CREMS student will assist with projects related to treatment toxicities in cancer: (i) Data collection and preliminary data analysis for a study of serial screening for ototoxicity (hearing loss) in cisplatin-treated head and neck, lung, and testicular cancer patients, using a novel iPad-based hearing test. (ii) Analysis of relationships between clinical patient characteristics and ototoxicity/nephrotoxicity in a cohort of 600+ patients who have undergone cisplatin chemotherapy for head and neck cancer at Princess Margaret.

The student will interact with patients, administer screening tests, collect data from surveys and medical chart review, and analyze data with the help of a supervising biostatistician. The students will also liaise with clinic staff and identify barriers and facilitators to implementing iPad-based screening as part of regular clinical practice. There will be a lot of exposure to patients, and experience gained with cancer management.

The student will become familiar with cancer research methods including common reporting systems for treatment toxicities such as the Common Terminology Criteria for Adverse Events (CTCAE), as well as clinical presentations of cancer patients receiving cisplatin chemotherapy. At the end of the summer, the student will present their final research work as an oral presentation, and will have the opportunity to submit their work to academic conferences.

The Liu Lab’s summer training program takes on multiple medical and pre-med students every year, and is a welcoming and collaborative environment for all students interested in contributing to clinical cancer research. Previous CREMS students in the Liu Lab have presented their work at major clinical oncology conferences such as ASCO and the World Conference on Lung Cancer. We are looking for dedicated, self-driven, and curious individuals with a strong interest in oncology and health research.