Comprehensive Research Experience for Medical Students
Summer Research Program 2019

Supervisor/Project Information Form
Due February 20 2019 by email to crems.programs@utoronto.ca

Supervisor Name: Raymond Jang

Project Title: Clinicopathological features and treatment outcomes of young patients with gastroesophageal cancers

Hospital/Research Institution: Princess Margaret Cancer Centre

Email: Raymond.jang@uhn.ca

Field of Research (2 keywords): gastroesophageal cancer, young adults

Department: Medicine / Medical Oncology

School of Graduate Studies Appointment (IMS, LMP, IHPME etc)? Yes/No: No

Project Title: Clinicopathological features and treatment outcomes of young patients with gastroesophageal cancers

Brief Project Description (<300 words):

Background and Rationale:
Gastric and esophageal (GE) cancers are a major health burden globally, most commonly occurring in older adults with a median age at diagnosis in the 60's. Previous studies report distinct clinicopathological features in adolescent and young adult (AYA) patients, defined by the National Cancer Institute as those aged 15-39. These features include female predominance, diffuse-type histology, and more advanced disease at diagnosis. There are inconsistent reports regarding prognosis in AYA patients, and treatment characteristics and outcomes in this group have not been extensively studied.

Project aims:
1. Characterize the clinicopathological features of GE cancers in AYA patients
2. Examine the treatments used in AYA patients and the impact on survival outcomes

Methods:
A retrospective analysis will be performed for AYA patients (age <40 at diagnosis) treated for GE cancers at the Princess Margaret Cancer Centre from 2008-2016. Data collected will include baseline patient

demographics, tumour characteristics, pathologic results, and treatment regimens. The Kaplan-Meier method will be used to calculate progression free and overall survival.

Relevance:
Improved understanding of GE cancer characteristics and treatment outcomes specific to AYA patients will help facilitate discussions between patient and physician regarding prognostication and management.

Student Role:
The student will be involved in chart review, data collection and statistical analyses. He/she will prepare an abstract/poster for presentation at a conference, with the goal of publishing a manuscript. He/she will have access to biostatistics support and will have guidance from a medical oncology resident and staff medical oncologist. To facilitate understanding of clinical aspects of the disease, he/she will have opportunities to participate in oncology clinics.
Learning objectives include:
- Perform a literature search and critically appraise relevant literature
- Use/maintain a clinical research database
- Work with a biostatistician to apply commonly used biostatics tests
- Learn general principles of care for GE cancer patients