Molecular Genetics Graduate Topic Course

Course Title: Signalling Networks in Development, Regeneration and Disease
Course Location: Lunefield-Tanenbaum Research Institute (LTRI)
Course Time and Date: Nov. 23, Nov. 25, Dec. 2, Dec. 7, Dec. 9
Course Instructor(s): Jeff Wrana
Instructor Contact Information (email): wrana@lunenfeld.ca
Additional Lecturers (list name, email, Department): TBA

Course Overview:

Development, homeostasis and regeneration of animals requires extensive intercellular communication that serves to regulate cell fate choice, and tissue morphogenesis. In this course we will explore how signalling networks orchestrate tissue morphogenesis, tissue regeneration, and drive initiation and progression of disease. Areas of coverage include an overview of morphogen signalling networks and single cell biology in zebrafish, mouse and organoid models of human disease.

Course Objectives:

- Learn about how cell signaling controls cell fate and tissue morphogenesis

Marking Scheme:

- Presentation to class (30%)
- Written proposal (70%)

Define policy for any absence. For example:
If you anticipate missing a class you must let the instructor know in advance, given the weight on participation and the fact that there are only six classes. Providing that you had a legitimate reason for missing the class, you will be provided with an assignment based on the reading for that week that you can use to make up for the lost class.