Course Title: Post-transcriptional Regulatory Mechanisms
Course Location: Room 1522 MaRS West Tower
Course Time and Date: Mondays from 3pm-5pm
Course Instructor(s): Julie Claycomb and Craig Smibert
Enrollment Cap: 12
Instructor Contact Information (email): julie.claycomb@utoronto.ca**;** c.smibert@utoronto.ca

Course Overview:

This course will cover topics related to the mechanisms underlying post-transcriptional control of gene expression.

Each week, the instructors will ~50 min lecture on that week's topic.

Following the presentation the class will discuss a paper related to the topic. Students (either volunteers or chosen at random) who were not involved in that week's presentation will present individual figures from the paper.

Course Objectives:

- To obtain a detailed understanding of select topics in post-transcriptional regulation
- To gain experience researching a field and generating an oral presentation
- To gain experience reading papers and critically evaluating them

Marking Scheme:

- 25% In-class participation - we expect all students to participate in all aspects of each class. This includes asking questions of the lecturers and participating in the evaluation and discussion of the methods, data and conclusions, as well as the significance of the results for the field
- 25% In-class presentation of paper figures
- 50% Written assessments of one aspect of that week's papers. For example, prior to each week's class, students will be expected to evaluate one of the following: the rigor of the science, clarity of the presentation, strength of the conclusions, impact on the field, and next steps. (Assessments are 1 per week x 5 weeks, 10% each; one week may be skipped.) **These assessments are due prior to each week's class by email. File format should be an MS Word doc.**

Course schedule:

Oct. 27, 2025	3pm-4pm	Organizational meeting (MaRS 1522)

Nov. 3, 2023	3pm-5pm	Topic 1: Translational Control
Nov. 10, 2025	3pm-5pm	Topic 2: Translational Control in development
Nov. 17, 2025	3pm-5pm	Topic 3: RNA Stability
Nov. 24, 2025	3pm-5pm	Topic 4: Regulation of RNA Stability during development
Dec. 1, 2025	3pm-5pm	Topic 5: RNA localization
Dec. 8, 2025	3pm-5pm	Topic 6: Control of RNA localization during development

Attendance:

Attendance is mandatory, and we will not make exceptions for foreseeable absences (i.e. pre-planned out-of-town travel, etc). Students who know in advance that they cannot be present for all classes should not enroll in the course this year. Exceptions will be made for illness that is documented with a doctor's note. Students must notify instructors before the absence whenever possible. In such cases students will be provided with an assignment based on the reading for that week that can be used to make up for the lost class.

Withdrawal:

Students may withdraw from the course up to the end of the second two hour session (when up to 33% of the course has been completed). To request withdrawal from a module, please email the instructors.