

CHM1051HS Current Topics in Chemical Biology

Lecturers: Prof. Beharry and Prof. Woolley

Lecture location: On-line via Zoom: <https://utoronto.zoom.us/j/89112869206>, Passcode: 627222

Lecture Time: 10 am - 12 pm, Mondays

Week 1	1/9/2023	Prof. Beharry Topic: Fluorescence-Guided Surgery
Week 2	1/16/2023	Prof. Beharry Topic: High throughput Screening
Week 3	1/23/2023	Prof. Beharry Topic: Journal Club
Week 4	1/30/2023	Prof. Beharry Topic: Grant Writing and Presenting Data
Week 5	2/06/2023	Prof. Woolley Topic: Fluorescent proteins: history and applications
Week 6	2/13/2023	Prof. Woolley Topic: Chemical genetics
Week 7	2/20/2023	NO LECTURE – Reading Week
Week 8	2/27/2023	Prof. Woolley Topic: Caged compounds and chemical photoswitches
Week 9	3/06/2023	Prof. Woolley Topic: Optogenetics, genetically encoded photoswitches
Week 10	3/13/2023	Student Presentations
Week 11	3/20/2023	Student Presentations
Week 12	3/27/2023	Student Presentations
Week 13	4/03/2023	Student Presentations

Mark Breakdown

Participation via attendance (10%)

Research paper presentation (30%)

Grant-like research proposal (30%)

Research proposal defense (30%)

Presentation

The student will present a critical review of a recent medicinal chemistry/chemical biology publication from a top tier journal. It is highly recommended the general topic of the paper chosen will be the same as your proposal.

Proposal

The student will be expected to write a 3-page proposal on the selected publication with a goal of proposing a program that will seek to improve and optimize and/or apply the published technology.

Proposal Defense

The student will give a 5 min (max.) oral summary of their written proposal, then defend their proposal in a 20-minute defense with Prof. Beharry and Prof. Woolley. The student will be expected to have strong knowledge of the work proposed as well as the relevant literature.