



Biochemistry 530  
Graduate Student Seminar Schedule 2023-2024

Friday's, 11:50 am to 1:00 pm  
**IRC 1, in-person**  
**Exception: \*LSC 3 - 1.5 hours classes**  
**11:50 am to 1:30 pm, in-person**

**Chairs: Dr. Lindsay Eltis and Ethan Greenblatt**

**Course regulations:**

- Set-up time: 11:50 am -12:00 pm. Presentations will commence at 12:00 and will be no longer than 18 minutes in duration, followed by 5 minutes for questions.
- The presentation titles emailed to Doris **a week before** the scheduled presentation date.
- **ATTENDANCE IS MANDATORY FOR ALL GRADUATE STUDENTS, ALL YEARS.**

**Third Year - 13 PhD students - Zbarsky Prize Competitors; Second Year - 1 PhD**

Date	Speaker	Supervisor	Presentation Title
8-Sep-23	First Class - Course Summary with instructors: Drs. L Eltis, and E. Greenblatt		
15-Sep-23	Francesca Ferraresso	Dr. Christian Kastrop	Developing RNA Therapies for Bleeding Disorders
	Abisola Kehinde	Dr. Seth Parker	Alanine, Cancer, Big Deal?
22-Sep-23	Victoria Palmgren	Dr. Robert Molday	Base editing for the treatment of inherited retinal diseases
	Kaicheng Ma	Dr. Ethan Greenblatt	Understanding the Role of Translational Control in Oocyte Function
29-Sep-23	Hannah Shariati	Dr. Calvin Yip	Trash Talk: Exploring autophagosome-lysosome fusion fidelity
	Shaun Peters	Dr. Natalie Strynadka	Activator-induced conformational changes of cytotkinetic <i>Escherichia coli</i> Amidase A
6-Oct-23	Armando Palacios Chaparra	Dr. Natalie Strynadka	<b>There are no mistakes, only happy accidents:</b> Native purification of <i>Clostridioides difficile</i> nanomachines
	Morgan Towriss	Drs. Annie Ciernia & Brian MacVicar	Understanding Microglial Memory in Health and Disease
<b>*13-Oct-23</b>	Steven Jiang	Dr. Hugh Kim	The role of Filamin A in platelet thromboxane A2 secretion
	Kha Nguyen	Dr. Calvin Yip	Structural investigation of a two-timing Rab regulator
	Nicolas Pereyra Dos Santos	Drs. Dana Devine & Jayachandran Kizhakkedathu	Next-Generation Materials for Blood Transfusion and Storage
<b>*20-Oct-23</b>	Helena Sverak	Dr. Natalie Strynadka	Breaking the Mold: Probing Peptidoglycan Recycling as a Novel Antibiotic Target
	Al Rohet Hossain	Dr. Ethan Greenblatt	The Fly's Guide to Translation: <i>Drosophila</i> Oocytes in Action
	Jeff Seog Jae Yoon	Dr. Alice Mui	Anti-inflammatory pathway of Interleukin-10: SHIP1 and microRNA

**Second Year - 2 PhD & 21 MSc Students**

27-Oct-23	Sevan Gholipour	Dr. Nobu Tokuriki	Comprehensive characterization of $\beta$ -lactamase resistome
	Subash Chapagain	Dr. Eric Jan	Of form and essence: Investigating the novel viral internal ribosome entry sites (IRESs)
3-Nov-23	Alexandria Shaw	Drs. Calvin Yip & John Burke	Investigating the regulation of a human lipid kinase
	Keith Tidey	Dr. Sriram Subramaniam	SARS-CoV-2: Kraken the Code
10-Nov-23	Lucy Song	Dr. Leonard Foster	Investigation of HLAs and Their Presented Immunopeptides for Susceptibility to Celiac Disease
	William Stewart	Dr. Harry Brumer	Systems-based characterization of <i>Prevotella copri</i> xyloglucan metabolism and optimization of a dietary fiber mimetic system
No Seminar - Midterm Break November 13 -15			
17-Nov-23	Tessa Smith	Dr. Natalie Strynadka	Powering a Nanomachine: the Type 3 Secretion System
	Steve Harland	Dr. Robert Molday	Shedding light on photoreceptors: The nanodisc reconstitution of tetraspanin PRPH2
24-Nov-23	Shriya Kamat	Dr. Thibault Mayor	Unraveling the physiological role(s) of a serine-threonine containing co-chaperone
	Elijah Hoy	Dr. Calvin Yip	Exploring how EPG5 exerts spatial and temporal control over autophagy
<b>*01-Dec-23</b>	Jessica Koe	Dr. Seth Parker	Protein Makeover: Investigating the role of N-glycosylation in regulating SNAT2 stability and function
	Sana Ahmed	Dr. Sriram Subramaniam	Visualizing degraders for the targeted protein degradation of p97
	Matthew Thibodeau	Dr. Natalie Strynadka	<i>C. difficile</i> antibiotic signaling

08-Dec-23	Zehua Shangguan	Dr. Filip Van Petegrem	A comprehensive characterization on the Junctophilin related mechanism in muscle Excitation-Contraction coupling
	Kimberly Wong	Dr. Nobu Tokuriki	Bridging the Gap between Organism-Enzyme Phenotype: the case of Phosphotriesterase in Paraoxon degradation

#### Second Year continue - 21 MSc students

05-Jan-24	Xingyu (Cara) Fan	Dr. Nobu Tokuriki	Evolution of a cannibalistic enzyme from a non-catalytic ancestor
	Danisha Johal	Dr. Seth Parker	Alanine's Tale in the Tumour: A pancreatic cancer metabolic fuel
12-Jan-24	Rupinder Jandu	Dr. Franck Duong	Investigating ligand interactions on the membrane proteome through thermal proteome profiling
	Lucy Shuxin Chi	Dr. Leonard Foster	Single-cell proteomics: refine, enhance, and apply
19-Jan-24	Katie Danielson	Dr. Ethan Greenblatt	Is ribosomal damage a fundamental driver of oocyte aging?
	Henry Young	Dr. Sheila Teves	Conservation and divergence of TBP and its paralogs throughout evolution

#### First Year - 16 MSc students and 1 PhD

26-Jan-24	Adesh Baral	Dr. Eric Jan	Proteolytic cleavage of 14-3-3 $\epsilon$ and its effects on antiviral response
	Yuming Shi	Dr. Leonard Foster	BeeCSI: Omics Tools for Assessing Honeybee Health
2-Feb-24	Vivien Dang	Dr. Annie Ciernia	Identification of Microglial Receptors In Response To Gut Microbiota-Derived Metabolites
	Dongkyu Lee	Dr. Nobu Tokuriki	High-throughput synthesis and phenotyping of $\beta$ -lactamases to elucidate molecular mechanisms of antibiotic resistance
9-Feb-24	Yoona Chey	Dr. Carol Chen	Characterization and Identification of Epigenetic Driver Mutations in High Grade Glioma (HGG)
	Maor Arad	Dr. Leonard Foster	Development of a Portable Hydrogel Based Proteomic Workflow
16-Feb-24	Catherine Gong	Dr. Eric Jan	Elucidating the host protein targets of the CVB3 3C protease
	Marvin Bader	Dr. Filip van Petegem	Inhibition of Ryanodine Receptors through engineered scorpion toxins
23-Feb-24	No Seminar - Reading Week - February 19 - 23		
1-Mar-24	Iris Shen	Dr. Eric Jan	Host cellular pathways modulated by a multifunctional insect viral protein
	Olivier Hinse	Dr. Dieter Bromme	It's a Match: Enzymatic Ligation between Viral & Self Proteins
08-Mar-24	Emily Yeh	Dr. Carol Chen	Investigating contrasting germline mutations: SETD2 associated neurodevelopment syndromes
	Vincent Halim	Drs. Eric Jan & Sarah Hedtrich	Optimization of CRISPR-Cas9 mRNA Design to Yield Efficient and Safe Gene Editing in Human Epithelia
15-Mar-24	Adam Voss	Dr. Natalie Strynadka	Mucinases Facilitating the Attaching and Effacing Lesion
	John Ni	Drs. Sriram Subramaniam & Annie Ciernia	Investigating F-actin organisation in Baf53b-mediated neurodevelopment
22-Mar-24, held in LSC 1416	Sally Cheon	Dr. Nobu Tokuriki	Comprehensive mutational analysis of class A $\beta$ -lactamases.
	Alexander Wong	Dr. Sheila Teves	Investigating the Interactome of Sox2 Disease-Causing Mutants
	Sahil Chandhock	Dr. Thbault Mayor	Mapping the interactome of cytosolic misfolded proteins using BioID
29-Mar-24	No Seminar - Good Friday, March 29, 2024		
05-Apr-24			
12-Apr-24			