Recent Advances in Immunology IMM1016Y

Mondays 1:30-3:30 pm
Location: MSB 2173 (unless otherwise specified)

Course coordinators
Tracy McGaha and Michele Anderson (tmcgaha@uhnresearch.ca, manderso@sri.utoronto.ca)
Please note that students who are not in the graduate program in Immunology need to obtain prior permission from the course coordinator to register for this course.

Lecture	TOPIC	SPEAKER
12-Sept	Introduction and scheduling presentations	Anderson/McGaha
19-Sept	Evolution of the immune system	Ehrhardt
26-Sept	T cell development	Zúñiga-Pflücker
03-Oct	B cell development	Paige
10-Oct	***Thanksgiving, University closed***	
17-Oct	Transcriptional control of lymphopoiesis	Anderson
24-Oct	Antigen processing - MHC class I	Williams
31-Oct	Antigen processing-MHC class II	Watts
07-Nov	Spatial organization of the immune response	Gommerman
14-Nov	Antibody diversity	Martin
21-Nov	T cell activation	Rottapel
28-Nov	B cell activation	Ratcliffe
5-Dec	Midterm Exam begins	

MIDTERM EXAM: Questions will be chosen and distributed during on Dec 5, to be handed back in for marking on Thursday, Dec 8 by 5 pm to the Immunology office.

DATE	TOPIC	
09-Jan	Apoptosis	Berger
16-Jan	T cell homeostasis	Poussier
23-Jan	Gut associated immune system	Poussier
30-Jan	Host-pathogen interactions	Gray-Owen
06-Feb	Natural Killer Cells	Carlyle
13-Feb	Adhesion/Migration	Cybulski
20-Feb	***Family Day, no lecture***	
27-Feb	NKT cells	Mallevaey
06-Mar	T cell co-stimulation	Watts
13-Mar	Innate Immunity of Lower Organisms	Penninger
20-Mar	HIV	Ostrowski
27-Mar	Innate immune receptors	Philpott
03-Apr	T regulatory cells	Zhang
10-Apr	***CSI, no lecture***	
17-Apr	B cell tolerance	Wither
24-Apr	Immunology of Insulin Resistance	Winer

01-May	Genes in Immunology	Mak
08-May	Final Exam	McGaha/Anderson

FINAL EXAM: Questions will be chosen and distributed at the end of May 8, to be handed back in for marking on Thursday May 11, by 5 pm to the Immunology office.

Course organization:
The course will follow a lecture/seminar format. Each session will include an overview of the topic followed by an in depth analysis of recent key advances. A student will be assigned to each session and will present a paper in class. Depending on the course enrollment, it is anticipated that each student will give one presentation. The faculty member selects 2-3 papers, including a review, for the class to read and an additional paper to be presented in class by a student. The student assigned to each session will be responsible for contacting the professor **two weeks in advance** of the lecture to request citations for the papers for the class to read, and to **remind the speaker of the date, time, and location of the lecture**. The student will arrange to send the citations to the course coordinator **one week before class**, who will post it on Blackboard for the rest of the class. After reading the paper for presentation, the student should feel free to discuss it with the professor in advance of the session. The student will succinctly summarize the background, methods and key findings of the paper and point out any pitfalls or problems. Plan for the presentation to take no more than twenty minutes.

Exams:
The grade for the course will be based on one final mid-term take-home exam and one take-home final exam. There will be three questions for the midterm and three questions on the final exam (maximum two pages per answer). Answers for the take-home exams should be done independently. The exams will be marked by the faculty member that provided each question.

Mark allotment: 35% of the marks will come from the midterm exam, 45% from the final exam, and 20% from the presentation. All grading will be done by the professor who submitted the question or assigned the paper for presentation, and the course coordinator will assemble the marks and administer the final mark.

Prerequisite:
The prerequisite for this course is a basic background in Immunology obtained from at least one recent full-year undergraduate course. The course will be taught at a fairly advanced level. Students who are missing background knowledge in some areas should fill the gaps from the textbook, discussions with colleagues, or advice from faculty members.

Recommended textbook:
Primer to The Immune Response, 2nd Edition. Tak W. Mak, Mary Saunders, and Bradley Jett. 2014 (Academic Press).

Academic Integrity
Academic integrity is fundamental to learning and scholarship at the University of Toronto. Participating honestly, respectfully, responsibly, and fairly in this academic community ensures that the U of T degree that you earn will be valued as a true indication of your individual academic achievement, and will continue to receive the respect and recognition it deserves.