

## Recent Advances in Immunology IMM1016Y

**Mondays 1:30-3:30 pm (unless otherwise specified)**

**Location:** MSB 3278

*Course coordinator*

Tracy McGaha ([tmcgaha@uhnresearch.ca](mailto:tmcgaha@uhnresearch.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.**

<b>Lecture</b>	<b>TOPIC</b>	<b>SPEAKER</b>
(Speaker/class times are subject to change)		
11-Sept	Introduction, scheduling presentations	McGaha
11-Sept	Innate Immunity	Philpott
18-Sept	no class	
25-Sept	T cell development	Zúñiga-Pflücker
02-Oct	B cell development	Paige
<b>09-Oct</b>	<b><i>Thanksgiving, University closed</i></b>	
16-Oct	Myeloid cell development and diversity	Mortha
23-Oct	Spatial organization of the immune response	Gommerman
30-Oct	Antibody diversity	Martin
06-Nov	Antigen processing-MHC class I	Watts
13-Nov	Antigen processing-MHC class II	Watts
20-Nov	T cell activation	Rottapel
27-Nov	B cell activation	Ratcliffe
04-Dec	Evolution of the immune system	Ehrhardt
04-Dec	Midterm Exam begins	McGaha

**MIDTERM EXAM:** Questions will be distributed on Dec 4 after class, to be handed back in for marking on Thursday, Dec 7 by 5 pm to the Immunology office.

08-Jan	Apoptosis and immunity	Berger
15-Jan	GALT and immunity	Poussier
22-Jan	NK cells/ ILCs	Carlyle
29-Jan	NKT/MAIT cells	Mallevaey
05-Feb	Immuno-metabolism	Winer
12-Feb	HIV	Ostrowski
<b>19-Feb</b>	<b><i>Family day, no lecture</i></b>	
26-Feb	Allergy and hypersensitivity	Eiwegger
05-Mar	Autoimmunity	Wither
12-Mar	Cancer Immunology	Zhang
19-Mar	Genes in Immunology	Mak
26-Mar	Immunity in lower organisms	Penninger
09-April	Final exam begins	McGaha

**FINAL EXAM:** Questions will be chosen and distributed in class April 9, to be handed back in for marking on Thursday April 12, 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.