

## Recent Advances in Immunology IMM1000Y

### **Date/Time:**

Mondays 1:30-4:00pm (unless otherwise specified)

### **Location:**

Health Science Building – Room 108  
155 College Street  
TORONTO, ON, Canada  
M5T 1P8

### **Course coordinator:**

Arthur Mortha (arthur.mortha@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 (date/topic/speaker):** (Speaker/class times are subject to change)

FINAL EXAM: Questions will be distributed on April 9, to be handed back in for marking on Friday April 12, by 5 pm to the Immunology office.

SEPT-16/2019	INTRODUCTION	Mortha
SEPT-16/2019	Innate Immunity	Philpott
SEPT-23/2019	T cell development	Zuniga-Pflucker
SEPT-30/2019	Spatial organization of the immune response	Gommerman
OCT-7/2019	B cell development	Paige
OCT-14/2019	<u>THX GIVING</u>	
OCT-21/2019	Myeloid cell development and diversity	Mortha
OCT-28/2019	Antigen processing-MHC class I	Watts
NOV-4/2019	Antigen processing-MHC class II	Watts
NOV-11/2019	Antibody diversity	Martin
NOV-18/2019	T cell activation	Rottapel
NOV-25/2019	B cell activation	Treanor
DEC-2/2019	Evolution of the adaptive immune system	Erhardt
DEC-9/2019	MID TERM EXAM begins*	
	<u>WINTER HOLIDAYS</u>	
JAN-06/2020	Apoptosis and immunity	Berger
JAN-13/2020	GALT and immunity	Poussier
JAN-20/2020	NK cells and ILCs	Crome
JAN-27/2020	NKT cells and MAIT cells	Mallevaey
FEB-3/2020	Immuno-metabolism	Woo
FEB-10/2020	<u>FAMILY DAY</u>	

FEB-17/2020	HIV	Ostrowski
FEB-24/2020	Allergy and hypersensitivity	Eiwegger
MAR-2/2020	Autoimmunity	Wither
MAR-9/2020	Cancer Immunology	Zhang
MAR-16/2020	Genes and Immunology	Mak
MAR-23/2020	FINAL EXAM begins*	

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**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. At least one 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

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.

**Accessibility Needs:**

The University of Toronto is committed to accessibility. If you require accommodations for a disability, or have any accessibility concerns about the course, the classroom or course materials, please contact Accessibility Services as soon as possible: [disability.services@utoronto.ca](mailto:disability.services@utoronto.ca) or <http://studentlife.utoronto.ca/accessibility>.