

IMM430H1/IMM1430H: “Clinical Immunology”

I. Course Coordinators: Dr. Shannon Dunn, sdunn@uhnresearch.ca
Office hours are available upon request.

II. Description: This course will address the underlying pathogenesis as well as highlight the challenges of treating or preventing immune-related conditions such as autoimmunity, cancer, HIV, and transplantation and graft rejection. Some lectures will address the genetics and cellular pathogenesis of autoimmune diseases such as Multiple sclerosis and Systemic lupus Erythematosus. Other lectures will overview some underappreciated roles of the immune system in disease.

III. Location: Tuesdays 3-5 pm, Sandford Fleming Building (SF) 1101

IV. Marking Scheme (will differ for students in IMM430 vs. IMM1430)

Undergraduate Students (IMM430H1):

25% core writing assignment, 35% midterm exam, 40% final exam.

Graduate Students (IMM1430H):

20% core writing assignment, 20% graduate writing assignment, 30% midterm exam, 30% final exam.

V. Lecture Format: 60-90 min lecture. Each lecture will be provided by a different lecturer who’s research specialty is in the area of the material. The lecture notes may or may not be provided by the lecturer. Be prepared to take notes in class.

VI. Exams: The midterm and final will both consist of short-answer questions based entirely on the lecture material. The midterm and final will be the same for undergraduate and graduate students. The midterm will cover material up to and including that presented on February 13th and is restricted. The final exam will be based only on material covered after the midterm and is also restricted (will not be handed back). We do not provide sample exams from past years to study from.

VII. Text: There is no textbook for the class. All material to be examined will come from lecture notes and notes transcribed in class. Notes may or may not be posted on Blackboard prior to the lecture, depending on the lecturer’s preference. Note that some professors provide paper handouts in class, but do not post notes on blackboard. It is your responsibility to attend lectures and to make notes based upon the class material. Most lecturers permit voice recorders.

VIII. Marks: Marks will also be uploaded on Blackboard. To access the course materials, go to the following website <https://weblogin.utoronto.ca/> and login with your UTORid and password. Course materials can be accessed under IMM430H1 or IMM1430H.

IX. Missed Test Policy: If you miss the midterm, you will have to re-write the exam within a timely fashion (as soon as you are feeling better) and you will have to provide a valid reason and provide appropriate supportive documentation. The format of the midterm will be the same as that administered in the formal exam session. Students who miss the final exam for a valid reason may petition to the Faculty of Arts and Science to write the deferred exam in the summer months. The format of the deferred exam will be the same as that administered in the formal exam session.

X. Re-mark Policy: Since the midterm exam is restricted, you have a right to review your midterm with the course coordinator. You will have to make an appointment with Dr. Dunn to do so and this has to be done before the last day of class. The final can only be viewed or remarked by Dr. Dunn after petitioning the Faculty of Arts and Science. There will be no re-mark of the writing assignments.

XI. Lecture Dates and Topics:

January 9: Dr. Tae Joon Yi “HIV” (TA: Eddy)

January 16: Dr. Tae Joon Yi “Multiple Sclerosis” (TA: Eddy)

January 23: Dr. Thomas Eiwegger “Allergy” (TA: Eddy)

January 30: Dr. Eleanor Fish “Ebola” (TA: Eddy)

February 6: Dr. Andrzej Chruscinski “Heart transplantation” (TA: Heather)

February 13: Dr. Dan Winer “Immune system in obesity” (TA: Heather)

February 20: Reading week

February 27: Midterm (in class at regular class time)

March 6: Dr. Rae Yeung “Kawasaki disease” (TA: Heather)

March 13: Dr. Joan Wither “Systemic Lupus Erythematosus” (TA: Heather)

March 20: Dr. Eyal Grunebaum “Primary immune deficiencies- lessons from rare events”. (TA: Paulina)

March 27: Dr. Josef Penninger “Osteoimmunology” (TA: Paulina) ******note this lecture will start at 4 pm instead of 3 pm.**

April 3: Dr. Tracy McGaha “Tumor immunology” (TA: Paulina)

Contact Information for Course Lecturers

Dr. Andrzej Chruscinski

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Dr. Thomas Eiwegger

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Dr. Eleanor Fish

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Dr. Eyal Grunebaum

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Dr. Tracy McGaha

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Dr. Josef Penninger

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Dr. Daniel Winer

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Dr. Joan Wither

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Dr. Rae Yeung

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Dr. Tae Joon Yi

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XII. Other Important Dates: March 1st is the last day to drop Winter session courses for graduate students.

February 13th—Graduate writing assignment due (IMM1430 students only).

March 13th—Core writing assignment due by the end of class.

XIII. Core writing assignment (Undergraduate and Graduate Students):

Students will write a scientific essay on the following topic:

“Chimeric antigen receptor (CAR) T cells for treating human malignancies”

(due date is by end of class on March 13th and will be time-stamped in class). If you do not make this deadline, you will lose 10% of your mark and additional 10% for every day that the paper is late.

Each essay should attempt to address the following questions or aspects of this therapy:

- What is this immune-based therapy and how does it work?
- What is the history of development of this therapy (listing key studies and people involved)?
- Describe some of the key clinical trials (i.e., early studies and the most successful studies).
- How is CAR T cell therapy used presently in the clinic?
- Are there any safety concerns of using this therapy?

The writing assignment will be marked by the TAs. The following general marking rubric will be applied:

A maximum of 50% of marks will be awarded for thoroughness of research
 A maximum of 50% of marks will be awarded for organization of material, clarity and organization of writing, and formatting/presentation.

TAs will each mark one third of the papers. Each TA will assign a grade based on the rubric and how the paper compares to others within his/her pile. The course coordinator will ensure that each TA is marking similarly by adjusting the grades such that the median grade is the same for each TA. There will be no re-mark of the papers.

Paper format requirements:

- The expectation is that the paper will be written like a scientific review paper.

The paper should consist of 10 pages maximum, not including tables, figures and the bibliography. Tables and figures are not required, but can be included (maximum 3 in total Non-original tables and figures will not be marked and need to be properly cited or a deduction will be applied for improper citation (see Referencing source material).

The paper needs to be double-spaced, Font: 12 pt Times, one-inch margins. Page numbers should be included on all pages with the exception of the cover page. The cover page should include the student's name, student number and title of the report.

Referencing/Citations and source material:

- Quotations are not permitted
- When you have derived concepts from source material (which is expected), you must reference that source material in the text using a superscripted number¹.
- Your bibliography will then contain an enumerated list of references.
- Reference style in the bibliography will be similar to that in pubmed:
 1. Peiris, J.S., K.Y. Yuen, A.D. Osterhaus, and K. Stohr. The severe acute respiratory syndrome. 2003. N. Engl. J. Med. 349:2431-2441.

Note: Your term paper will be subject to "Turnitin" or other originality check software. You will be given the chance to check your originality report prior to the final submission of your paper. Those papers flagged by Turnitin will be reviewed by the course coordinator. If there is evidence of extensive paraphrasing or direct lifting of written material from primary research articles,

the course coordinator will deduct marks from the term paper at her discretion.

XIV. Graduate writing assignment (Students in IMM1430 only):

Students will write a scientific essay on the following topic:

“Immunology of PANDAS syndrome”

The expectation is that the paper will be written like a scientific review paper. Compared to the core writing assignment, there are less strict guidelines on what needs to be discussed. The student is welcome to explore what key aspects he/she finds to be interesting.

(due date is by end of class on February 13th and will be time-stamped). If you do not make this deadline, you will lose 10% of your mark and additional 10% for every day that the paper is late.

The marking rubric and paper format is the same as for the undergraduate writing assignment. The paper will be marked by one TA. There will be no re-mark of the paper.

XV. Teaching Assistants:

Last Name	First Name	IMM429F TA list
Chen	Edward	eddy.chen@mail.utoronto.ca
Drohomyrecky	Paulina	paulina.drohomyrecky@mail.utoronto.ca
MacGregor	Heather	h.macgregor@mail.utoronto.ca