

**UNIVERSITY OF TORONTO – DEPARTMENT OF IMMUNOLOGY**  
**IMM2500H - Recent Advances in Clinical Immunology - Winter Term 2023**

**COURSE DESCRIPTION, OUTLINE AND LECTURE SCHEDULE**

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**COURSE COORDINATOR:** Dr. Adrian Sacher ([adrian.sacher@uhn.ca](mailto:adrian.sacher@uhn.ca)),

**TIME:** Tuesday - 1:30 PM to 3:30 PM

**LOCATION:** Robarts Library, 130 St George St, Room RL 14190

**OVERVIEW AND OBJECTIVES:**

This course is designed to give basic science students in immunology an appreciation of clinical issues and diseases relevant to the broad field of Immunology, hopefully planting the seeds for future collaboration between bench and clinical science researchers. The topics covered by the lecturers include Type 1 Diabetes, RA, SLE, MS, Cytokines, GVHD, Tumor Immunotherapy, Adoptive Cell Therapy, Infectious Diseases (HIV, HBV), Solid Organ Transplantation and others. An additional focus of the course will be to discuss approaches to translational research as well as clinical trial design.

**COURSE FORMAT:**

Each session will consist of an overview of the week's topic (~60min) followed by discussion of 1-2 papers (~30-60min) chosen by the lecturer as illustrating major findings/breakthrough/problems in the field. Papers will be given to the students in advance of the lecture. The goal is to stimulate interaction/discussion between the lecturers and the students.

**REQUIREMENTS AND EVALUATIONS:**

Students are required to read the assigned papers/articles prior to each lecture. There will be a mid-term assignment in which students will be asked to create a mock translational study or clinical trial grant proposal. The final exam is a take home exam where students are asked to answer two short essay questions related to topics covered during the lecture. Each lecturer is asked to provide an essay question. Students will choose two of these essay questions and will have 48 hours to complete the exam.

<b>SCHEDULED LECTURES</b>		
<b>DATE</b>	<b>LECTURER</b>	<b>TOPIC</b>
January 10	Adrian Sacher	Introduction to Translational Research & Drug Development
January 17	Joan Wither	Systemic Lupus Erythematosus
January 24	Robert Inman	Interplay of Genetics and Infection in Arthritis
January 31	Jayne Danska	Autoimmune Diabetes
February 7	Mario Ostrowski	HIV Immunopathogenesis, Viral Persistence and CD4 Decline
February 14	Adrian Sacher	Immune Checkpoint Inhibitors, Immune Agonists and Drug Development in Solid Tumor Immunotherapy
February 21	No lecture	Reading week
February 28	Valeria Ramaglia	Autoimmune Diseases of the CNS
March 7	Stephen Juvet	Solid Organ Transplant Immunotherapy
March 14	Ken Croitoru	Inflammatory Bowel Disease
March 21	Adam Gehring	HBV Immunopathogenesis and Novel Therapeutics
March 28	Eleanor Fish	Interferons as 1 <sup>st</sup> Responders for Acute Viral Infections
April 4	Adrian Sacher	Adoptive Cell Therapy in Solid Tumors (auto & allo CAR-T, TCR and TIL)
<b>April 12</b>	<b>Final Exam</b>	

*Last Update: December 6, 2022*