IMMUNOLOGY 301
2018-2019

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Immunology 301 is a required course, to be taken in the Fall and Spring semester of the G1 year.

To fulfill the requirements of this course and receive a satisfactory grade, students must attend each Discussion class and turn in a 1-2 page paper on the assigned reference paper. You are also required to attend each Lunch and Seminar.

Lunch: 12 - 1 in Rosen Classroom, Rm. 100A, Jeffrey Modell Center
Each Wednesday, students registered for IMM301 meet with the seminar speaker over a casual lunch and may discuss anything that is considered relevant.

Discussion Class: Wednesdays, 2:30 - 4:00pm in Rosen Classroom, Rm. 100A, Jeffrey Modell Center
The IMM 301 discussion class meets from 2:30 – 4 PM, throughout the year, and is led by an Immunology faculty member whose expertise is in the topic of the seminar. ***The 1-2 page write-ups are due via email to the faculty member leading the session by the end of the day before the class (Tuesday).***

The course will be divided into two halves (Fall and Spring). The overall course objectives are the same in both halves, but the emphasis in Spring broadens to include consideration of **scientific significance.**

Fall Semester: Prior to each Wednesday afternoon seminar, the speaker provides a set of 2-3 references. Students are expected to read all the references and the faculty leading the discussion class will select one of the articles to be written up and reviewed by the students and discussed in detail in class.

Points for students to address in their 1-2 page review of the article:

- Do the experiments described in this paper test a hypothesis (if so, how would this hypothesis be phrased), or could this work be classified as descriptive?
- What is the state of this particular field at the moment of publication (i.e. what is the background of the work more generally?)
- What is the methodology employed to address the questions asked, and is this methodology appropriate? Are there alternative methods that would be equally useful?
- Do the data presented warrant the conclusions made by the authors?
- Are there additional experiments/controls that would have strengthened the authors' conclusions?
- What would you consider a logical extension of the work presented?
- On the whole, would you consider this paper a significant contribution to the field?

Spring Semester: The goal of the discussion class in the second half of the year is to learn how to design and write a grant proposal. Prior to each Wednesday afternoon seminar, the speaker provides their CV with a complete or selected bibliography. Students are expected to:

a) review the body of work completed by the speaker
b) look at the speaker's work as a whole and write a specific aims page on what you think they should focus on next.
c) demonstrate an understanding of how their research advances existing thought on the subject.
d) **Two students will be required to write a Specific Aims page of a grant for future studies based on the speaker's work. This will be presented to the class and discussed with the other students and the Faculty leader**

Seminar: 4:00 - 5:00pm in the Armenise Amphitheater

Post Seminar Reception: 5:00 – 5:45 pm in Modell Center Atrium

Post Seminar Dinners take place at various local restaurants for out-of town speakers. The dinners are attended by the seminar speaker, faculty host, and two students, and will begin on September 5.

HMS Committee on Immunology Seminar Series

Wednesdays, 4:00 PM
Armenise Amphitheater
210 Longwood Avenue

Wednesday, September 5, 2018:
Dr. Ulrich von Andrian, Harvard Medical School
"Extra- and intra-vascular immune surveillance by anti-viral T cells"

Wednesday, September 12, 2018:
Dr. Beth Stevens, Boston Children's Hospital
"Pruning CNS Synapses: An Unexpected Role for Glia and Proteins of the Classical Complement Cascade"

Wednesday, September 26, 2018:
Dr. Catherine Wu, Dana Farber Cancer Institute
"Development of Personalized Cancer Vaccines"

Wednesday, October 3, 2018:
Dr. Isaac Chiu, Harvard Medical School
"Neuro-immune interactions in infection and host defense"

Wednesday, October 10, 2018:
Dr. Kate Schroder, University of Queensland
"New insights into inflammasome signalling and function"

Wednesday, October 17, 2018:
Dr. Aviv Regev, Broad Institute
"Using cell atlases to understand disease"

Wednesday, October 24, 2018:
Dr. Michael Fischbach, Stanford University
"Small molecules from the human microbiota"

Wednesday, November 7, 2018:
Dr. Marco Colonna, Washington University School of Medicine
“Innate Lymphoid Cells in Mucosal Immunity”

Wednesday, November 14, 2018: Evergrande Lecture
Dr. Yasmine Belkaid, National Institute of Allergy and Infectious Diseases
“Commensal control of tissue immunity”

Wednesday, November 28, 2018
Dr. Diane Mathis, Harvard Medical School
“Tissue-Tregs and the cells that nurture them”

Wednesday, December 5, 2018:
Dr. Sohail Tavazoie, The Rockefeller University
"A surprising role for ApoE in regulation of cancer metastasis and immune suppression"
Spring 2019

Wednesday, January 30, 2019:
Dr. Paul Kubes, University of Calgary
"Imaging the immune system in tissue repair"

Wednesday, February 6, 2019: Rosen Lecture
Dr. Lora Hooper, University of Texas Southwestern Medical Center
"Metabolism, the microbiome, and the circadian clock"

Wednesday, February 13, 2019:
Dr. Wendell Lim, University of California - San Francisco
"Hacking Immune Cells: Learning by Building"

Wednesday, February 20, 2019: Evergrande Lecture
Dr. Thirumala-Devi Kanneganti, St. Jude Children's Research Hospital

Wednesday, February 27, 2019:
Dr. Mark Davis, Stanford University

Wednesday, March 6, 2019: Evergrande Lecture
Dr. Julie Blander, Weill Cornell Medicine
"Detecting and responding to microbial viability"

Wednesday, March 13, 2019:
Dr. Ruslan Medzhitov, Yale School of Medicine
"Inflammation and Defense of Homeostasis."

Wednesday, March 27, 2019:
Dr. Luke O'Neill, Trinity College – Dublin

Wednesday, April 3, 2019:
Dr. Bimal Desai, University of Virginia
"Electrical Signals at the crossroads of Inflammation and Tissue Homeostasis"

Wednesday, April 10, 2019:
Dr. Mikael Pittet, Massachusetts General Hospital
"Myeloid Cells in Cancer"
Please note: This seminar will not be available for livestreaming.

Tuesday, April 16, 2019: Special Tuesday Benacerraf Lecture: 5 PM Start
Dr. Antoni Ribas, UCLA

Wednesday, April 17, 2019:
Dr. Veit Hornung, Ludwig-Maximilians University - Munich
"Inflammasome signalling in the human system"

Wednesday, April 24, 2019:
Dr. Akiko Iwasaki, Yale University
"Antiviral defense mechanisms at mucosal surfaces"

Wednesday, May 1, 2019:
Dr. Mihai Netea, Radboud University medical Center
"Trained immunity: a memory for innate host defense"