Immunology 507 - Immune Responses
Director: Craig Bassing, Ph.D.
Prerequisites: Immunology 506
Taught: Spring term, TR (1pm - 3pm)
Credit: 1 c.u.

This course assumes basic knowledge of the immune system. The course is a team-taught, lecture-based course that utilizes experimental data from the primary literature to examine basic cellular and molecular aspects of the immune system. The course is an extension of Immunology 506 and focuses on advanced topics in immunology and specific examples of immunological diseases. This course will alternate between faculty-led interactive lectures and student-led presentations and discussions of primary papers. Although this is a new course, it actually just combines parts of Immunology 508 and Immunology 605 to enable students sufficient time for Biom 555, which is now a required course for IGG students.

Format

Faculty Participation
-- Assign 1-2 reviews and 1-2 papers that students are expected to read before their lecture
-- Assign two papers for one student to present and discuss in a journal club format during the class following their lecture
-- Present an interactive lecture with substantial emphasis on experiments from the primary literature
-- Provide a grade (0, 1, or 2) for each student on their participation during the lecture
-- Serve as a sounding board for students in preparing their journal club
-- Attend and moderate student presented journal club

Student Participation
-- Read assigned reviews and papers prior to faculty lectures
-- Attend and ask/answer questions during the faculty lectures
-- Prepare and present the two assigned journal club papers (this should also require the students to read additional papers and reviews in the field)
  -- provide brief background
  -- introduce questions being asked in each paper
  -- present the pertinent data
  -- compare and contrast papers
  -- critique or defend papers
  -- address why you think faculty chose these two papers (why are they emblematic of and/or important to the field?)
-- Ask questions and join in discussion during the journal club presentation

Grading
Participation during the lectures (0, 1, or 2)
Participation during the journal clubs (0, 1, or 2)
Journal club presentation (graded by Craig Bassing or John Wherry with input from faculty)
Syllabus

Friday January 13: Organizational Meeting (Craig Bassing)

Tuesday January 17: Lecture: Class Switch Recombination and Hypermutation (Bassing).
Thursday January 19: Presentation 1

Tuesday January 24: Lecture: Lymphoid Malignancies (Bassing)
Thursday January 26: Presentation 2

Tuesday January 31: Lecture: Tumor Immunology and Immunotherapy (Powell)
Thursday February 2: Presentation 3

Tuesday February 7: Lecture: Primary Immuno-deficences (Roth)
Thursday February 9: Presentation 4

Tuesday February 14: Lecture: Autoimmune Disorders (Luning Prak)
Thursday February 16: Presentation 5

Tuesday February 21: Lecture: Autoimmune Arthritis (Caton)
Thursday February 23: Presentation 6

Tuesday February 28: No class due to

555 Midterm in class on morning of March 1

Thursday March 1: Lecture: Transcriptional Control of Immune Cell Fates (Pear)

Springbreak: Tuesday March 6 and Thursday March 8

Tuesday March 13: Lecture: Transcriptional Control of Immune Cell Fates (Bhandoola)
Thursday March 15: Presentation 7

Tuesday March 20: Lecture: Epigenetic Control of Immune Cell Fates (Wherry)
Thursday March 22: Presentation 8 (John Wherry grades presentation)

Tuesday March 27: Lecture: Mouse Models of Chronic Viral Infections
Thursday March 29: Presentation 9 (John Wherry grades presentation)

555 News and Views due March 30

Tuesday April 3: Lecture: HIV Pathobiology (Betts)
Thursday April 5: Presentation 10

Tuesday April 10: Lecture: Systems Biology of Immune Cells (Wherry)
Thursday April 12: Presentation 11
Tuesday April 17: Lecture: Mucosal Immunity (Artis)
Thursday April 19: Presentation 12

Tuesday April 24: Lecture: Bacterial Immunity (Brodsky)
Thursday April 26: Presentation 13

555 Final in class morning of May 1
Tuesday May 1: Lecture: Bacterial Immunity (Shin)
Thursday May 3: Presentation 14