

IMMUNOLOGY

Imm 8400f,w,s,su. IMMUNOLOGY MASTER'S PROJECT. (3 cr; A-F) Staff

The Master's project will consist of a scholarly written review of an important area of immunology. Topics will be chosen by the student in consultation with the advisor and the student's advisory committee. The written review will describe the current state of understanding in the area, identify outstanding questions and controversies, and describe potential future directions for research that will address these questions. The final document and an oral defense of the document must be of sufficient merit to satisfy all members of a four-member advisory committee, to be selected and approved by the Immunology Graduate Program Director prior to beginning work on the Master's project.

Imm 8862f,w,s CURRENT TOPICS IN CELL ACTIVATION AND SIGNALING. (1 cr; S-N) Billadeau (f), Hedin (w), Bram (s)

Weekly discussions of recent scientific literature on topics related to receptors, transmembrane signaling mechanisms, and gene expression. *Register in fall quarter only (1 cr./year). Attendance required fall, winter and spring.*

Imm 8863f,w,s. CURRENT TOPICS IN IMMUNOLOGY. (1 cr; A-F; prerequisite Core 6200 or equivalent) Cascalho

Current literature on important areas of immunology. Critical review of methods, results and findings. *Register in fall quarter only (1 cr./year). Attendance required fall, winter and spring.*

Imm 8864f,w,s. TRANSPLANTATION BIOLOGY JOURNAL CLUB. (1 cr; S-N) Platt, Brunn, Cascalho, Tang

The Transplantation Biology Journal Club provides a forum for discussion of recent advances in immunology which may bear relevance on the field of transplantation. Topics of discussion include lymphocyte development, generation and selection of TCR and BCR repertoires, APC-T cell interactions, establishment and maintenance of immune tolerance, innate immunity, and immune regulation. All participants are encouraged to take active part in the discussion and in the presentation of research articles.

Imm 8867f,w,s. CURRENT TOPICS IN HYPERSENSITIVITY REACTIONS. (1 cr; A-F; consent of instructor is required) Kita, Bankers-Fulbright

This is a series of seminars on hypersensitivity with particular emphasis on immediate-type reactions, immune regulation, and cells and mediators in hypersensitivity. Students are evaluated by their performance of a seminar during the course.

Imm 8877w. TUTORIAL IN MOLECULAR BASIS OF IMMUNE RECOGNITION. (2 cr; A-F; offered odd years; prereq Core 6200 or equivalent) Pease, Jelinek, David

Regulation and structure of genes and proteins that function in specific immune recognition. Genes of the MHC, T cell receptors, and immunoglobulins will be featured.

Imm 8879w. TUTORIAL IN CELLULAR ACTIVATION. (2 cr; A-F; offered even years; prereq Core 6200 or equivalent, basic knowledge of receptor pharmacology is desirable but not a requisite) Bram, Hedin, Billadeau

This course focuses on the intracellular signaling pathways which regulate the activation, growth, and differentiation of lymphoid cells. Additional emphasis is placed on molecular mechanism of immunosuppression by cyclosporine, FK506, and related compounds.

Imm 8880s. TUTORIAL IN INFECTION AND IMMUNOPATHOLOGY. (2 cr; A-F; offered odd years) Poeschla, Rodriguez, Lennon, Bankers-Fulbright, Plager

Concepts in the immunopathology of virus and bacterial infection, autoimmunity, tumor immunology, and transplantation. Emphasis will be on immune mechanisms that the host uses to respond against pathologic agents, how dysregulation of these responses lead to autoimmunity, and adaptive strategies infectious agents use to evade immunity.

Imm 8882w. TUTORIAL IN INNATE IMMUNITY AND INFLAMATION. (2 cr; A-F; offered odd years; prereq Core 6200;) Leibson, Kita, Wettstein

The course will review the biology of NK cells, macrophages, and other major cellular components in the innate immunity. The current knowledge on the receptors and molecules, which are used by these cell types to recognize microorganisms and self- and nonself antigens, will be discussed. The molecular and cellular mechanisms involved in inflammation, host defense, and mucosal and other organ-specific immunity will be discussed.

Imm 8884w. TUTORIAL IN TUMOR IMMUNOLOGY. (2 cr; A-F; offered even years; prereq Core 6200 or equivalent), Knutson, Vile, Kwon

Concepts in tumor immunology. This course is based on the current literature with heavy emphasis on student/faculty discussion.

Imm 8886s. TUTORIAL IN TRANSPLANTATION AND IMMUNOLOGICAL TOLERANCE. (2 cr; A-F; offered even years; prereq Core 6200 or equivalent) Platt, Cascalho

This course focuses on the discussion of forces that impact the success or failure of experimental and clinical transplants. Emphasis is placed on controversial topics including mechanisms of antigen presentation, tolerance, co-stimulation, effector functions, and tissue repair.

Research

Imm 8840f,w,s,su. RESEARCH IN IMMUNOLOGY. (6 cr/qtr; S-N) Staff

Graduate thesis research for Master's students under supervision of staff.

Imm 8852f,w,s,su. RESEARCH IN IMMUNOLOGY. (S-N) Staff

Graduate thesis research for Ph.D. students under supervision of staff.