

PHARMACOLOGY (PHAR)

PHAR 901 RECEPTOR & CELL SIGNALING 3 Credit Hours

A detailed description of receptors in terms of their roles in the recognition of neurotransmitters, drugs and hormones, and their regulation of signal transduction pathways in the cell. Discussion of the methods for in vitro and in vivo analysis of receptors is included.

Prerequisite: IPBS 803 and/or permission from instructor

Typically Offered: FALL

PHAR 902 HUMAN SPECIFIC DISEASE MODELING IN MICE 2 Credit Hours

This course introduces the novel mouse models engrafted with human cells, to study human-specific diseases. The course covers research methodologies: 1. For the creation of specific mouse backgrounds that are compatible for the engraftment of human cell, tissue and tumors. 2. To study (a). human-specific infections and immune responses, (b). developmental biology and regeneration of human cells and tissues, and (c). therapeutics development.

Prerequisite: One completed immunology course and permission of instructor

Typically Offered: SPRING

PHAR 907 NEURAL SYSTEMS & THE PHYSIOLOGY OF NEURONAL CELL POPULATIONS 2 Credit Hours

This course aims to establish an understanding of population-level neurophysiology in human and non-human primates. Fundamental concepts to be covered will include biophysics of neural populations, dendritic potentials, cortical mini- and macro-columns, neural oscillatory dynamics, distributed processing, neural systems of the human brain, and supra-thalamic functional neuroanatomy.

Prerequisite: BRTP 824, PHAR 820 and permission of instructor.

Typically Offered: FALL

PHAR 912 HUMAN SPECIFIC DISEASE MODELING IN MICE 2 Credit Hours

This course introduces the novel mouse models engrafted with human cells, to study human-specific diseases. The course covers research methodologies: 1. For the creation of specific mouse backgrounds that are compatible for the engraftment of human cell, tissue and tumors. 2. To study (a). human-specific infections and immune responses, (b). developmental biology and regeneration of human cells and tissues, and (c). therapeutics development.

Prerequisite: BRTP 822, BRTP 823, and permission of instructor.

Typically Offered: SPRING