MCMC 625/BICH 625 Nucleic Acid-Protein Interactions
Credit 1. 1 Lecture Hour.
Mechanisms of nucleic acid-protein interactions involved in fundamental biochemistry processes such as DNA replication and rearrangement, transposition, transcription, RNA splicing and translation; original research articles presented focusing on experimental approaches, interpretation of results and overall significance.
Prerequisite: Approval of the department head.
Cross Listing: BICH 625/MCMD 625.

MCMC 671/BICH 671 Macromolecular Folding and Design
Credit 1. 1 Lecture Hour.
The Macromolecular Folding and Design Journal Club is to serve as a mechanism for oral dissemination of current knowledge regarding the structure and function of biological macromolecules.
Prerequisite: Approval of the department head.
Cross Listing: BICH 671/MCMD 671.

MCMC 672/BICH 672 Biological Membranes
Credit 1. 1 Lecture Hour.
Seminar-based course examining recent discoveries in the structure, function and assembly of biological membranes; students give an oral presentation on current literature in molecular biology, biochemistry and/or biophysics.
Prerequisite: Approval of the department head.
Cross Listing: BICH 672/MCMD 672.

MCMC 674/BICH 674 Protein Folding and Stability
Credit 1. 1 Lecture Hour.
Selected topics from recent literature in the general areas of protein folding, structure and stability.
Prerequisite: Approval of the department head.
Cross Listing: BICH 674/MCMD 674.

MCMC 675 Molecular Pathogenesis
Credit 1. 1 Lecture Hour.
Oral presentations and discussions from current literature in the general area of the molecular mechanisms involved in disease. May be taken 12 times.
Prerequisite: Approval of the department head.

MCMC 676 Frontiers in Regenerative Medicine
Credit 1. 1 Lecture Hour.
This course will follow a "journal club" format in which a student will serve as the discussion leader for the weekly journal meeting at the Institute for Regenerative Medicine. Papers will be elected from the recent literature in the areas of regenerative medicine/stem cell research. The primary purpose of the course is oral dissemination of recent knowledge of regenerative medicine. Secondarily, it will serve as a training mechanism for students who wish to improve their presentation skills with a wide spectrum of scientists at various levels of expertise.
Prerequisite: MSCI 601.

MCMC 677/GENE 677 Genes and Diseases
Credits 3. 3 Lecture Hours.
Molecular and genetic basis for human disease; structure, function and evolution of chromosomes; epigenetics; gene mapping; complex genetic traits; cancer genetics; neurodegenerative disorders, animal models (yeast, mouse, worms, fruitflies); ethics.
Cross Listing: GENE 677/MCMD 677.