

MCMD - MOLECULAR CELL MEDICINE

MCMD 625 Nucleic Acid-Protein Interactions

Credit 1. 1 Lecture Hour. Mechanisms of nucleic acid-protein interactions involved in fundamental biochemical 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.

MCMD 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.

MCMD 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.

MCMD 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.

MCMD 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.

MCMD 685 Directed Studies

Credits 1 to 6. 1 to 6 Lecture Hours. Limited investigation in fields other than those chosen for thesis or dissertation. **Prerequisite:** Approval of instructor.

MCMD 689 Special Topics

Credits 1 to 4. 1 to 4 Lecture Hours. Selected topics in an identified area of biochemistry and genetics. May be repeated for credit when topics vary.