

Program: Microbiology and Immunology

Course Name: Recombinant DNA Techniques in Molecular Biology (Molecular Approaches to Research)

Course Number: 0520

Course Director: Bettina A. Buttaro, Ph.D. Room 505 Kresge. Tel.: 2-3212, E-mail: bbuttaro@temple.edu. Team taught

Credits: 3

Semester: Spring, every other year

Times: Meets twice weekly for 4 hours

Location: OMS Classroom

Prerequisites: All students are required to have a background in genetics and biochemistry.

Description: The goal of the course is to present current approaches to research. Topics will include:

- 1) Cloning strategies
- 2) Analysis of Gene Expression
- 3) Transgenic Mice
- 4) Protein Purification
- 5) Protein Localization
- 6) Protein Interactions
- 7) Bioinformatics
- 8) Global Expression Analysis – Microarrays and Proteomics

Students are expected to attend class and participate in class by contributing to discussion.

Textbook & Readings: The course is based on scientific literature related to current approaches and technical information regarding new reagents and procedures. Handouts, typically in the form of PowerPoint presentations, will be provided.

Exams are indicated on the course schedule and consist of take-home examinations. Class attendance is required. Student absence must be excused.

The grade in the course is based 100% on examination scores.

Office Hours – The Course Director and other instructors are available during the normal workday hours and by appointment.