

MCB 5427 Laboratory Techniques in Functional Genomics

The 1-credit laboratory modules each span 2-4 days and are completely hands-on. All genomics modules use the Center for Applied Genetics and Technology's state-of-the-art genotyping instrumentation. Any number and combination of modules may be taken and the credits applied toward MCB undergraduate or graduate degrees. Two sections of 5427 fulfill one MCB undergraduate lab requirement. Graduate level tuition rates apply. *MCB 5427-01 Introduction to Molecular Biology Techniques* is required for all modules for any students who have not had prior laboratory experience in molecular genetics techniques, including DNA gel electrophoresis and PCR.

MCB 5427 Laboratory Techniques in Functional Genomics

MCB 5427-01 Introduction to Molecular Biology Techniques. Students learn molecular genetics techniques, including DNA gel electrophoresis and PCR.

MCB 5427-02 FISH. Students will learn the theory and practice of Fluorescence in situ Hybridization to metaphase chromosome spreads.

MCB 5427-03 Real Time PCR. Learn the theory and practice of quantitative PCR.

MCB 5427-04 Genotyping and Sequencing Techniques. Learn sequencing techniques for use in molecular biology.

MCB 5427-05 Gene Chip Techniques. Learn Affymetrix Gene Chip array techniques and analyses.