

Advanced Molecular Genetic-MCBI 7440 Spring 2012

2-4 PM Biotechnology Conference Room

Cell Signaling, Cell Cycle Regulation, Gene Expression & Cancer

Date	Lecturer/ Department	Topic
Jan. 11	McCubrey (MCBI)	Introduction to Course and Eukaryotic Cell Growth-Basic Requirements
Jan. 12	McCubrey (MCBI)	Oncogenes and Tumor Suppressor Genes
Jan. 17	McCubrey (MCBI)	Cancer Stem Cells & Cancer Therapy
Jan. 19	Lemasson (MCBI)	Eukaryotic Transcription-I
Jan. 24	Lemasson (MCBI)	Eukaryotic Transcription-II
Jan. 26	Bertrand (Hem/Onc)	Chromosomal Translocations & Cancer Therapy
Jan. 31	Bertrand (Hem/Onc)	Notch and Cancer Stem Cells & Targeting
Feb. 2	McCubrey/Letchworth	Exam 1
Feb. 8	Lehman (PATH)	Cell Cycle Regulation and Cancer
Feb. 9	Lehman/ (PATH)	Teratocarcinomas and their uses in Therapy/Research
Feb. 14	McCubrey (MCBI)	Genetic Aspects of Cell Signaling Pathways- Proliferation/Apoptosis
Feb. 16	Franklin (MCBI)	Functional Aspects of Cell Signaling Pathways-Stress Induced
Feb. 21	Franklin (MCBI)	Epigenetic Regulation of Gene Expression
Feb. 23	Franklin (MCBI)	Hormone Responsive Cancers
Feb. 28	McCubrey/Letchworth (MCBI)	Exam

Prokaryote Genome Structure and Dynamics & Mechanisms of Genetic Control

Date	Lecturer/ Department	Topic
March 4 - March 11	Spring Break	March 4 - March 11
Mar. 13	Roop (MCBI)	Prokaryote Genome Structure
Mar. 15	Roop (MCBI)	Genes to Gene Products and Genetic Analysis
Mar. 20	Pesci (MCBI)	Plasmids and Plasmid Replication
Mar. 22	Pesci (MCBI)	Regulatory RNA
Mar. 27	Smith (MCBI)	Conjugation and Plasmid Transfer
Mar. 29	Smith (MCBI)	Transposons and Transposition
Apr. 3	Pesci/Letchworth	Exam III
Apr. 5	Coleman (MCBI)	Operon Structure
Apr. 10	Coleman (MCBI)	Operon Control- Negative Regulation and Attenuation
Apr. 12	Martin (MCBI)	Sigma Factors in Gene Regulation

Apr. 17	Martin (MCBI)	Mechanisms of Genetic Switching
Apr. 19	Motaleb (MCBI)	Prokaryotic Signal Transduction- Genetic Structure of Two Component Regulatory Systems
-	-	Turn in Term Papers on this date. If late, reduces one letter grade each day late.
Apr. 24	Motaleb (MCBI)	Two Component Signal Transduction
Apr. 26	Pesci/Letchworth	Exam IV
Note: All exams will be "in class" exams and not "take home".		