

ADVANCED TOPICS IN SIGNAL TRANSDUCTION AND CELL CYCLE REGULATION

CHEM 5801, Spring 2010

INSTRUCTORS: Faculty of the Signaling and Cellular Regulation Training Program

COORDINATOR: Natalie Ahn

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LECTURES: Tuesdays and Thursdays, 2:00-3:15 pm, Ekeley W165

COURSE MATERIALS: Lecture notes TBA

OFFICE HOURS: By appointment, Cristol Chem 200

EXAMS AND GRADING:

Literature Review Article	45%
Take Home Exam(s)	45%
Class Participation	10%

COURSE WEB ACCESS: TBA, sign up on CU Connect

ORGANIZATION AND GOAL OF THE COURSE: Lectures and discussion on topics in signaling and cell cycle regulation, by CU-Boulder's own masters in this field. We will cover fundamental pathways and mechanisms as well as new directions. Our goal is for students to learn how to design a research program to discover and characterize a novel signaling pathway.

SCHEDULE (Tuesday, Thursday):

January 12, 14	Natalie Ahn	Introduction, MAP kinase pathways
January 19, 21	Min Han	Ras signaling
January 26, 28	Jingshi Shen	Insulin signaling and homeostasis
February 2, 4	Natalie Ahn	Second messengers
February 9,11	Jennifer Kugel	Receptors - binding and signaling kinetics
February 16,18	Amy Palmer	Calcium signaling
February 23, 25	Jim Goodrich	Transcription mechanisms
March 2, 4	Jennifer Martin	TNF receptor signaling
March 9, 11	Ding Xue	Apoptosis
March 16,18	Hubert Yin	Small molecule probes of signaling
March 23, 25	Spring Break	No class
March 30, Apr1	Joaquin Espinosa	The p53 network
Apr 6, 8	Mark Winey	Cell cycle regulation
Apr 13,15	Tin Tin Su	DNA damage and apoptosis
Apr 20, 22	Natalie Ahn	Survival and drug resistance
Apr 27, 29	Literature review	
May 10	SCR Symposium (everyone invited)	