

Advanced Topics in Cell Biology  
Spring 2009

1. Friday Jan 23 Organizational meeting

**Signal Transduction (M. Lemmon)**

2. Monday, Jan 26, Friday Jan 30  
When is a kinase a kinase (or pseudokinase) Lemmon, Kazanietz
3. Monday Feb. 2, Friday Feb 6  
Lipid distributions/PIP2 pools and PI3K signaling Abrams, Birnbaum
4. Monday Feb 9, Friday Feb 13  
Systems logic in signaling Goulian, Radhakrishnan, Sarkar
5. Monday Feb 16, Friday Feb 20  
Signaling and Metabolism, Warburg effect, etc Birnbaum, Thompson?
6. Monday, Feb 23, Friday Feb 27  
Notch signaling – an aspect Pear, Kadesch
7. Monday, Mar 2, Friday Mar 6  
Oxygen sensing/signaling + ROS Simon, Lee
8. Monday Mar 9, Friday Mar 13  
Nuclear receptors Lazar

**Cell Cycle Regulation (R. Assoian)**

9. Monday, Mar 16, Friday Mar 20  
Overview....cyclins and cdks  
cyclins  
cdk inhibitors  
Rb-E2F
10. Monday Mar 23, Friday Mar 27  
Signal transduction pathways regulating cdk activity  
Cyclin D1 transcription?  
P27 phosphorylation  
P27 localization
11. Monday, Mar 30, Friday April 3  
Cell cycle control by ubiquitin-mediated proteolysis  
Skp2  
APC
12. Monday, Apr 6, Friday Apr 10  
Cycling without cyclins and cdks: lessons from knock-out mice
13. Monday Apr 13, Friday Apr 17  
Deregulated cell cycles  
Diabetes  
CVD  
Cancer

**Cell Division (M. Lampson & B. Black)**

14. Monday, Apr 20, Friday Apr 24  
TBA

15. Monday Apr 27, Friday May 1  
TBA