

## Syllabus for Signal Transduction and Cell Cycle 2001

### 1. Jan 23: Group Discussion.

Paper for discussion: "Mammalian Ras Interacts Directly with the Serine/Threonine Kinase Raf," 1993, Cell 74: 205-214.

Background reading: "The Hallmarks of Cancer" and your book.

### 2. Jan 30: Audrey

Paper for discussion: "The small GTP-binding protein rac regulates growth factor-induced membrane ruffling." Cell 70: 401-410, 1993.

Background reading: "Ras and Rho GTPase: a family reunion" and your book.

### 3. Feb 6: Todd

Paper for discussion: "Creation of human tumor cells with defined genetic elements," 1999, Nature 400: 464-468.

Background reading: "The Hallmarks of Cancer" and "Rebuilding the road to cancer."

### 4. Feb 13: Ping

Paper for discussion: "*S. cerevisiae* genes required for cell cycle arrest in response to loss of microtubule," 1991, Cell 66:507-517.

Background reading: "A Long 20<sup>th</sup> of the Cell Cycle and Beyond."

### 5. Feb 20: Tommy

Paper for discussion: "Mitosis in living budding yeast: Anaphase A but no metaphase plate." Science 277: 574-578. 1997.

### 6. Feb 27: Yair

Paper for discussion: "Cut2 proteolysis required for sister-chromatid separation in fission yeast," 1996, Nature 381: 438-441.

**7. Mar 6: Nadia**

Paper for discussion: "Polarization of the anterior-posterior axis of *C. elegans* is a microtubule-directed process." *Nature* 408: 89-92. 2000.

**8. Mar 13 - Spring Break.**

**9. Mar 20:** Proposal review

**10. Mar 27 & Apr 3:** No class-proposal preparation.

**11. Apr 10** –Proposal defense I

**12. Apr 17** – Proposal defense II.