SYLLABUS: CURRENT TOPICS IN BIOCHEMISTRY. BIOC-48100
SPRING 2008

Date	Topic and Reading Assigment
Jan 22 Jan 24	General introduction to cancer "continued"
Jan 29	Baylin, S.B. and Ohm, J.E. (2006). "Epigenetic gene silencing in cancer--a mechanism for early oncogenic pathway addiction." Nature Rev. Cancer, **6:** 107-116. **AND** Weinstein, I.B. (2002). "Addiction to oncogenes--the Achilles heal of cancer." Science, **297:** 63-64
Jan 31	Knudsen, E.S. and Knudsen, K.E. (2006). "Retinoblastoma tumor suppressor: where cancer meets the cell cycle." Exp. Bio. Med., **231:** 1271-1281.
Feb 5	Toledo, F. and Wahl, G.M. (2006). "Regulating the p53 pathway: *in vitro* hypothesis, *in vivo veritas*." Nat. Rev. Cancer, **6:** 909-920
Feb 7	Rosen, E.M. Fan, S. and Ma, Y. (2006). "BRCA1 regulation of transcription." Cancer Lett., **236:** 175-185
Feb 12	Taniguchi, T. and D'Andrea, A.D. (2006). Molecular pathogenesis of Fanconi anemia: recent progress." Blood, **107:** 4223-4232.
Feb 14	**Student 1:** Zhu, J.H. et al. (2007). "Protein tyrosine phosphatase PTPN13 negatively regulates Her2/ErbB2 malignant signaling." Oncogene [epub ahead of print], 1-7. **Student 2:** Jiao et al. (2006). "Nucleocytoplasmic shuttling of the retinoblastoma tumor suppressor protein via Cdk phosphoyrlation-dependent nuclear export." J. Biol. Chem. **281:** 38098-38107.
Feb 19	**Student 3:** Zawacka-Pankau et al. (2007). "Protoporphyrin IX interacts with wild type p53 protein *in vitro* and induces cell death of human colon cancer cells in a p53-dependent and independent manner." J. Biol. Chem., **282:** 2466-2472. **Student 4:** Hong, S. et al. (2008). *In vivo* reprogramming of hTERT by *trans*-splicing Ribozyme to target tumor cells. Molecular Therapy, *in press*.
Feb 21	**Student 5:** Li et al. (2006). "Suppression of colorectal tumor growth by regulated survivin targeting." J. Mol. Med., **84:** 1077-1086. **Student 6:** Xia, C. et al. (2007). Reactive Oxygen Species Regulate angiogenesis and tumor growth through vascular endothelial growth factor. Cancer Res., **67:** 10823-10830.

Feb 26	**Student 7:** Tsuchiya, N. et al. (2007). SND1, a component of RNA-induced silencing complex, is up-regulated in human colon cancers and implicated in early stage colon carcinogenesis. Cancer Res., **67:** 9568-9576. **Student 8:** Gibson et al. (2006). "Overexpression of the DNA mismatch repair factor, PMS2, confers hypermutability and DNA damage tolerance." Cancer Letts., **244:** 195-202.
Feb 28	**Student 9:** Glait et al. (2006). "Caveolin-1 controls BRCA1 gene expression and cellular localization in human breast cancer cells." FEBS Letts., **580:** 5268-5274. **Student 10:** Butcher, D.T. and Rodenhiser, D.I. (2007). "Epigenetic inactivation of BRCA1 is associated with aberrant expression of CTCF and DNA methyltransferase (DNMT3B) in some sporadic breast tumours." Eur. J. Cancer, **43:** 210-219.
Mar 4	**Student 11:** Boriello et al. (2006). "A novel Leu153Ser mutation of the Fanconi anemia FANCD2 gene is associated with severe chemotherapy toxicity in a pediatric T-cell lymphoblastic leukemia." Leukemia, **21:** 72-78. **Student 12:** Chirnomas et al. (2006). Chemosensitization to cisplatin by inhibitors of the Fanconi anemia/BRCA pathway. Mol. Cancer Ther, **5:** 952-961.
Mar 6	**Student 13:** Agrelo et al. (2006). "Epigenetic invactivation of the premature aging Werner syndrome gene in human cancer." PNAS, **103:** 8822-8827 **AND** Course evaluation.