

**Molecular Basis of Cancer, Fall 2019**  
**Dr. Sohail Tavazoie**

This course is designed to teach modern concepts in the regulation of growth control and its significance to cancer. The format consists of a weekly, two-hour lecture (Mondays 10 am – 12 pm), followed by informal discussion over lunch. Each lecture will be accompanied by a review and a research article to be discussed at lunch. (A reference list will be distributed at the first lecture.) Before the start of the course, students should read chapters 1-12 of *The Biology of Cancer* by Robert A. Weinberg (Taylor and Francis, Inc.) There will be a group homework assignment and a take home exam due by the end of the course.

Tentative Schedule:

10 am – 12 pm, Mondays, September 23 – December 9, 2019  
Lectures begin at 10 am in Carson Auditorium  
Journal Clubs will follow at 1pm in CRC 506

Lecture Schedule:

September 23: Introduction to Cancer (Sohail Tavazoie)  
September 30: PI3K signaling in Cancer (Lewis Cantley)  
October 7: Transformation, cell cycle CDKs (Andy Koff)  
October 14: DNA damage, repair and telomeres I (Titia de Lange)  
*CDDS retreat (students who attend this retreat will need to make up)*  
October 21: DNA damage, repair and telomeres II (Titia de Lange)  
October 28: Tumor metabolism (Kivanc Birsoy)  
November 4: Translational control in cancer and Myc (Davide Ruggero)  
November 11: Tumor Immunology and Immunotherapy (Andrea Schietinger)  
November 18: Cancer progression and metastasis I (Sohail Tavazoie) **in RRB110**  
November 25: Cancer progression and metastasis II (Sohail Tavazoie)  
December 2: Chromatin biology and cancer (Siavash Kurdistani)  
December 9: Ozge Birsoy and TBD