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