BMB 585

Course: Wistar Advanced Cancer Biology Course: Cancer Pathways
Location: The Wistar Institute, Grossman Auditorium, 3601 Spruce St
Time: Fall Semester 2015, Thursdays 2 - 4:00 pm

Course Co-Directors -
Emmanuel Skordalakes, Room 321C, The Wistar Institute, skorda@wistar.org
Maureen Murphy, Room 352, The Wistar Institute, mmurphy@Wistar.org

The course will cover basic pathways and mechanisms of cancer development and progression as well as current approaches for the identification of therapies for the treatment of cancer. Each session will consist of a one-hour lecture followed by a discussion on a review manuscript related to the topic presented and selected by the PI lecturing that day. Manuscripts will be assigned to the students a week in advance of the lecture and all are expected to read it and participate in class discussion. Students will also be required to take and pass a mid term and final exams consisting of short essays or questions related to the material taught during the course. This approach is designed to provide students with an integrated learning platform combining up-to-date basic mechanistic understanding of cancer pathways with more translational, disease-relevant topics in cancer therapy and molecular drug discovery.

Prerequisites: Senior undergraduate or graduate level biochemistry and molecular biology

Grading: Class Participation 10%
Mid term exam 30%
Final Exam 60%

Lectures:

September
03: Oncogenes and tumor suppressor genes
Maureen Murphy
10: Cancer Metabolism
Dario Altieri
17: Wnt pathways in cancer
Ashani Weeraratna
24: Cancer therapeutics targeting oncogenic kinases
Ronen Marmorstein

October
01: Melanoma and Cancer
Jessie Villanueva
08: Basic immunity and cancer recognition
Andrew Caton
15: Anti-cancer immunotherapies
Jose Conejo-Garcia
22: Mid Term Exam
HKA/B
29: B cells and Cancer
Andrew Hu

November
05: Ovarian cancer
Rugang Zang
12: Gene expression signatures in cancer
Louise Showe
19: Epigenetics and Cancer
Frank Rauscher
26: No Class
N/A

December
03: Viruses and Cancer
Paul Lieberman
10: Telomerase and cancer
Skordalakes Emmanuel
17: Final Exam
HKA/B