

BIOMG 7940/7800: Stem Cells and Cancer

Instructor:

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Description:

The overall purpose of the course is to provide discussion-based instruction on stem cells and cancer using recent and cutting-edge scientific articles. The course is organized as a journal club. Presentations of primary research papers will be given by enrolled students and faculty moderators will be on hand for each session to guide the discussion. This journal club will feature five sessions (each 1.5 hours) that deal with basic stem cell biology (across diverse organ systems), and the connection of stem cells to injury and aging, but also especially cancer.

The Spring 2018 offering will focus on the following topics:

- 1) Adult Stem Cells
- 2) Cellular Reprogramming during Injury and Aging
- 3) Pluripotent Stem Cells
- 4) Cancer Stem Cells I
- 5) Cancer Stem Cells I

The specific paper to be presented at each session is chosen in conjunction with the faculty moderator and circulated to all participants at least one week in advance.

Expectations for enrolled students:

Students will be required to attend the presentations and actively participate in the discussion. Students that miss a discussion session must submit a perspective article (one page, single spaced; approximately 500 words) on the paper that was discussed, to be submitted prior to the next class meeting. The first half of the essay should summarize the rationale, hypothesis, and results of the study. The second half of the essay should describe limitations of the work and ideas for future experiments. At the end of the course, all students will have a take-home written assignment in which they will be asked to answer a series of questions related to a paper provided by the course instructors. This writing assignment is due by e-mail to the instructor on May 18th. Grading is S/U.

The class will meet in the Veterinary Research Tower (VRT) 9th floor conference room from noon to 1:30 pm on the following Thursday dates:

January 25 - organizational meeting and 1st session
February 22
March 15
April 12
May 3

Each student in this course is expected to abide by the Cornell University Code of Academic Integrity. Any work submitted by a student in this course for academic credit must be the student's own work.