

CAMB 697: Biology of Stem Cells

Course Directors: Paul Gadue and Pantelis Rombolas

Syllabus – Summer 2020

Class meets Tuesdays and Thursdays at 3:30-5 PM. Class alternates between lectures given by the instructors and journal club presentations by the students.

Date	Speaker	Day	Class Type	Topic
6/2	First class	TUE	Intro	Organizational
6/9	Gadue	TUE	Lecture	ES and iPS Cells
6/11	Gadue	THU	JC	ES and iPS Cells
6/16	Anguera	TUE	Lecture	Epigenetics of Stem Cells
6/18	Anguera	THU	JC	Epigenetics of Stem Cells
6/23	BRAKE – ISSCR Meeting			
6/25				
6/30	Dyment	TUE	Lecture	Bioengineering
7/2	Dyment	THU	JC	Bioengineering
7/7	Vaughan	TUE	Lecture	Lung Progenitors and Regeneration
7/9	Vaughan	THU	JC	Lung Progenitors and Regeneration
7/14	Tong	TUE	Lecture	HSCs
7/16	Tong	THU	JC	HSCs
7/21	Lengner	TUE	Lecture	Organoids
7/23	Lengner	THU	JC	Organoids
7/28	Rombolas	TUE	Lecture	Epithelial Stem Cells
7/30	Rombolas	THU	JC	Epithelial Stem Cells

Description: The goal of this course is to introduce graduate students to the field of stem cell biology through lectures and reviews of important contributions from the literature. Topics include embryonic stem cells, epigenetics and reprogramming, tissue specific stem cells such as hematopoietic, and epithelial stem cells, tissue regeneration, and tissue engineering. The future potential and challenges in stem cell and regeneration biology will be discussed. Important aspects of stem cell identification and characterization utilizing multiple model systems will also be a focus. Offered Summer Semester. Limited to 14 students.