

CAMB 691. Advanced Topics in Cell Biology and Physiology I.

Course Organizers: Ben Prosser, Mickey Marks and Erika Holzbaur

Prerequisite(s): BIOM 600 or a similar survey course in cell biology. Permission required prior to registration for all non-BGS students.

An in-depth consideration of key topics in cell biology and physiology. This course will focus on key issues at the forefront of research in the areas of (1) ion channels, (2) intracellular transport and dynamics (3) tissue and molecular biomechanics, (4) cytoskeletal dynamics and cell division. The course format pairs faculty presentations with student-led discussion sessions highlighting important papers from the primary literature. Students will be evaluated on their presentations and participation in class discussions.

Course Overview

CAMB 691 is a seminar course for first and second year graduate students focusing on the in-depth consideration of key topics in cell biology and physiology. We will emphasize current questions in the field and how these questions can be addressed with new experimental approaches. The course will be organized around four major themes: (1) ion channels, (2) intracellular transport and dynamics (3) tissue and molecular biomechanics, (4) cytoskeletal dynamics and cell division. CAMB 691 will meet twice a week. New topics will generally be introduced in lectures presented by the faculty during the Monday sessions, and then will be discussed in depth in student-led presentations of relevant papers during the Friday sessions. Students will be evaluated based on their presentations and participation in class discussions.

Class will meet **Mondays from 10:30 AM to 12 PM in BRB1201, and Fridays from 10:30 AM to 12:15 PM in BRB1201.** [Organizational meeting will be held on Monday January 13th at 10.30 am in BRB1201.](#)

Course Organizers:

Benjamin Prosser
Dept. of Physiology
726 Clinical Research Building
(215) 746-1488
bpros@penmedicine.upenn.edu

Michael Marks
Dept. of Pathology & Laboratory Medicine, CHOP and Dept. of Physiology
816G Abramson Research Center
(215) 590-3664
marksm@penmedicine.upenn.edu

Erika Holzbaur
Dept. of Physiology
630 Clinical Research Building
(215) 573-3257
holzbaur@penmedicine.upenn.edu

Participating faculty:

Carol Deutsch, Vera Moiseenkova-Bell, Rebecca Wells, Joel Boerkel, Benjamin Prosser, Yale Goldman, Mathew Good, Michael Lampson, Ekaterina Grishchuk, Michael Ostap, Mickey Marks, Sandra Maday, Erika Holzbaur, Melike Lakadamyali