MSCBMP2875 - Experiments and Logic in Cell Biology (ELCB)

Course Directors:
Michael Butterworth, Ph.D. – 320S Starzl BST – (412) 383 8591 – michael7@pitt.edu
Adam Kwiatkowski, Ph.D. 324S Starzl BST – 412- 383-8139 - adamkwi@pitt.edu

Course Administrator:
Sarah Biancardi – S362 BST – 412-624-3177 – sab181@pitt.edu

Focus of the class:
This longitudinal course will explore the interplay between hypothesis generation and experimental methods in cell biology. The format is small group active learning where students in the Cell Biology and Molecular Physiology (CBMP) graduate program meet as a collaborative group to refine their experimental work toward their PhD thesis. The learning and teaching are focused on the thesis projects and experiments of the participating students. The class will be directed by the students and mentored by faculty trained in small group active learning. The students meet in class once a month as well as in a parallel virtual classroom. On-line sessions will be used to develop presentations for the in-class sessions as well as to reflect and facilitate implementation of suggestions developed in class. Students are required to take the course each fall and spring upon entry into the CBMP graduate program through the PhD thesis defense.

Meeting times and place:
In-class sessions are monthly on designated Wednesday's from 1:15 pm - 2:30 pm in the Department of Cell Biology, Conference Room, which is contained within the Department's office complex in S362 Starzl Biomedical Science Tower.

Learning objectives and how you will be evaluated:
ELCB grading is by ***peer- and self-evaluation***. At the end of each semester each student will be asked to write a short (e.g., half page) justification for a self-assigned grade and for a grade for one other student in the course. Peer-grading must be non-reciprocal. The two grades for a given student are then averaged for the final semester grade. The faculty will write a review for each student and has the option to adjust final grades but only upwards. Grading will be based on critical reflection of the following learning objectives of the course:

➢   presentation of hypotheses, experimental strategy, data, and interpretation
➢   participation in small group discussions in-class and on-line
➢   critical thinking skills development
➢   insights into hypothesis generation and selection
➢   insights into experimental design
➢   insights into the core logic of cell biology
➢   depth of knowledge of course goals
➢   amount of effort

➢ most of all amount of improvement

Keep track of the progress of yourself and the other student for which you are serving as a primary reviewer with written notes.