CAMB 700: Topics in Microbiology (Spring 2021)

Directors: Sarah Henrickson, Kellie Jurado, Matthew Weitzman and Joseph Zackular

Class Time: Tuesdays and Thursdays, 2:00-3:30 PM from January 20 to April 5

Location: The course will be held remotely (https://bluejeans.com/154385303/7244) for the first set of presentations (through February 24th). The second round of presentations will be held in person in CTRB 4040 at the Children's Hospital of Philadelphia. Access to the Children's Hospital requires a UPenn ID at the security desk. We will have admin support at the security desk to support students getting to class for the first few classes. A hybrid/remote option for the second round of presentations will be available in case of changes to University Policy and the evolving COVID-19 pandemic: https://bluejeans.com/154385303/7244

Course Description: This course is designed for second year students studying MVP program related projects and focuses on grant writing and presentation skills in the scientific area of microbiology and pathogen-host interactions. Introductory sessions address the role of storytelling in effectively communicating your research and the use of clear and concise schematics to convey the project. Course directors will also cover strategies for effective chalk talk presentations. In subsequent classes students will give two presentations on their research project. For the first presentation, the students will present a PowerPoint presentation on their project Specific Aims and project schematic. Each student presentation should provide sufficient background, discuss what is known and what is not known about the topic, frame two or three Specific Aims for a potential grant application. We will also discuss potential experimental strategies to address the central hypothesis of the grant proposal. The discussions are deliberately wide-ranging, and review recent literature, techniques, and how to construct a presentation and grant. There will be specific focus on expectations and alternative approaches. The second presentation given by each student will be given in a chalk talk format (white board). Students will present their project outline and Specific Aims during their chalk talk and field questions from faculty and students throughout.

There are four course directors who provide a breadth of research areas and will provide feedback on the specific topic being discussed. Students will also have to reach out to an additional topic expert for review of their project design and presentation. The students will learn how to prepare, present, and defend a research topic, as well as to integrate positive and negative criticism into the development of a strong research direction.

Outside experts: Each student will be required to identify and contact an outside expert in their field of research. They will meet with the outside expert at least twice in the semester. The first meeting will occur prior to their initial presentation in class. Students should receive feedback on their proposed Specific Aims from their outside expert. Students are then required to meet for a second time prior to their final presentation to discuss their progress and Specific Aims. We highly encourage students to meet with and stay in contact with their experts throughout the Spring semester and meet as frequently as needed. Faculty experts will not be restricted from student preliminary exam committees. Feedback forms will be provided to faculty experts to fill out after each meeting and given to faculty coordinator and students.

Course Evaluation: The success of the course rests entirely upon the discussion quality and engagement of the faculty and students involved. Class participation is 100% of grade.

Schedule:

- Jan 20: "In the beginning..." Course introduction with proposal hook and 2 minute elevator pitch
- Jan 25: "Show me the science..." Strategies for grant writing and presentations
- Jan 27: "Giving an effective chalk talk" Strategies for chalk talks and presentations from senior students
- Feb 1: Round 1 Presentations 1+2:
- Feb 3: Round 1 Presentations 3+4:
- Feb 8: Round 1 Presentations 5+6:
- Feb 10: Round 1 Presentations 7+8:
- Feb 15: Round 1 Presentations 9+10:

- Feb 17: Round 1 Presentations 11+12: Feb 22: Round 1 Presentations 13+14: Feb 24: Round 1 Presentations 15 + 16
- Mar 1: Round 2 Presentations 1+2: Mar 3: Round 2 Presentations 3+4: Mar 8: Round 2 Presentations 5+6: Mar 10: Round 2 Presentations 7+8:
- Mar 15: Round 2 Presentations 7 to:
 Mar 15: Round 2 Presentations 9+10:
 Mar 17: Round 2 Presentations 11+12:
 Mar 22: Round 2 Presentations 13+14:
 Mar 24: Round 2 Presentations 15 + 16
- Mar 29: Open office hours: Mar 31: Open office hours: April 5: Open office hours

Contact information:

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