

Bridging Bench to Clinical Medicine

Instructor:

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CHBE 8801 Special Topics Fall 2019 | Mondays, 5:00 to 5:50 PM

This class is intended for graduate students (at both the masters and doctoral level) in a wide range of biomedical science and biomedical engineering disciplines (i.e., CHBE, BIOE, BME, CHEM, and BIO) interested in performing biomedical research for potential future applications that will impact clinical medicine. The course will provide graduate students an opportunity to bridge biomedical research with clinical applications. The format is designed so that each week a different organ system or disease will be explored through case reports from medical journals in an effort to connect the relevance of biomedical applications with clinical disease and treatment. The case reports will be used as a basis for lecture and discussion related to clinical diagnosis, treatment, and interpretation. At the end of the semester, students will choose a case report relevant to his/her research and present to the class.

The syllabus for the course is as follows:

COURSE SYLLABUS

1. Week 1: Introduction – Review course format and objectives
2. Week 2: Head: Brain Tumors
3. Week 3: Neck: Thyroid Diseases
4. Week 4: Lungs: Lung Cancer
5. Week 5: Heart: Myocardial Infarction
6. Week 6: Gastrointestinal System: Crohn's Disease
7. Week 7: Pancreas I: Type 1 Diabetes Mellitus
8. Week 8: Pancreas II: Type 2 Diabetes
9. Week 9: Skeletal System: osteoporosis
10. Week 10: Oncology: Leukemia
11. Week 11: Student Presentations I
12. Week 12: Student Presentations II
13. Week 13: Student Presentations III
14. Week 14: Student Presentations IV

For more information about the course, please contact the instructor via email at efelner@emory.edu