

Acquired Brain Injury NSC 250

Course Description

This upper-level elective course provides unique perspectives on the clinical diagnosis, prognosis, and treatment of acquired brain injuries and diseases, along with their epidemiology and basic research findings, including those gleaned from associated animal models. It is intended for highly motivated students in their senior year with a strong inclination toward medical school or other clinical practice. The student will learn about clinical diagnostic methods, practice differential diagnosis and treatment planning through simulated (virtual) cases, and shadow clinicians as part of this course. Students will also engage with primary research literature to understand underlying pathological mechanisms for diseases such as stroke and cancer, as well as neuropathic pain and traumatic brain injury.

Cap: 24 students

Prerequisite: NSCI 201 and permission of the instructor

Textbook: None; PDF articles will be provided via BlackBoard

Room: Med Center 2-8130 (Neurosurgery conference room) or Meliora 178

Day/Time: **Mondays 2:00-4:40 pm**; recitation **Friday 12:00/12:30-1:30** (Meliora 178)

Shadowing:

Students will complete one shadowing experience, which consist of about 3-4 hours of clinical exposure. These can be in the operating room or either the inpatient or outpatient rehabilitation clinic (or other clinic setting). Students will write a one-page paper on their expectations due prior to the shadowing experience, as well as a one-page summary of the experience afterward. This must be a new shadowing experience completed during the spring but does not strictly have to be with one of the guest lecturers in the class. It should be brain-related.

OR: Dr. J. Stone, Dr. Bender

Clinic: Dr. Busza, Dr. R. Stone, Dr. Mongiovi, Dr. Huang, Dr. Bazarian, Dr. Mohile, Dr. Hemminger, Dr. Adams

Students will submit their Top 2 choices to BB by Jan 30.

Grading:

Grades will be based on participation, shadowing reports, and a final exam.

50% participation

20% shadowing reports (one pre-shadowing, one post-shadowing)

30% exams

Course Schedule Outline:

Lecture Date	Lecturer	Topic	Case assigned	Recitation
1/23	Renee Miller	Introduction & Anatomy	NO	YES
1/26	Nimish Mohile & Lauryn Hemminger	Cancer	Case 1 Unconscious Woman	YES
2/2	Jeff Bazarian	TBI part 1	Case 2 Mild TBI	YES
2/9	Ed Vates	Neurosurgery and Pituitary tumors	NO	NO
2/16	Robert Stone	Child Neurology; white matter disorders	Case 3 Obese Woman w Leg Pain	YES
2/23			Case 4 Motorcycle Accident	YES
3/2	Phillip Mongiovi	Neuromuscular disorders/ ALS	NO	NO
3/9		SPRING BREAK	NO	NO
3/16	Jamie Adams	Movement Disorders	Case 5 Non-Sports Concussion	YES
3/23	Matthew Bender	Stroke	Case 6 63yo woman	YES
3/30	David Toomey	Medical Toxicology	Case 7 86yo Man	YES
4/6	Ania Busza	Stroke Rehabilitation	NO	NO
4/13	Jonathan Stone	Peripheral nerves	Case 8 Extreme Fatigue	YES
4/20	Andrew Huang	Palliative Care	Case 9 Aphasia	YES
4/27	Paul Geha	Pain, central mechanisms	Case 10 Dizzy and Weak Man	YES
5/1	Exam			