

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