

# 685A Neurosurgery – Sub-Internship

This rotation is not accepting international students.

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**Course Name** Neurosurgery Sub-Internship    **Course Director** Sumeet Vadera, MD

## 1. Course Director, Coordinator and General Administrative Information

### FACULTY AND STAFF

Name	Office Location	Phone	Email
Director: Sumeet Vadera, MD	101 The City Dr., Bldg. 200, Ste. 210	714-456-6966	Svadera1@hs.uci.edu
Coordinator: Leslie Weterrings	101 The City Dr., Bldg. 200, Ste. 210	714-456-6966	lwetterri@hs.uci.edu

### DESCRIPTION

The Department of Neurological Surgery sub-Internship is a four-week, hands-on rotational experience emphasizing the development of clinical skills in neurological examination, strategies in patient care management, functional neuroanatomy, neuropathology, practical interpretation of neuroimaging, identification of emergent neurological conditions, as well as the fundamental skills of medical and surgical management of cranial, spinal and peripheral nerve disease.

Students experience a patient-care team approach, with the expectation that the student follows their patients, participate in operative cases, present at teaching conferences as well as take call. The sub-intern has an opportunity to follow residents on consults in the ER, Neuro-ICU and inpatient rounds. Duty hours are subject to the medical student duty hours.

The Department of Neurological Surgery consists of a diverse subspecialty faculty featuring, neurotrauma, functional, epilepsy, skull base neurosurgery and spine. The sub-intern has contact with faculty members on a daily basis. Faculty members enjoy and welcome medical students and guarantee an in-depth experience in neurosurgery.

The sub-internship is an advanced medicine experience for medical students who have already completed their basic clinical rotation in medicine. We accept sub-interns year-round.

The weekly schedule consists of daily rounds with the patient-care team, followed by participation in the operating room with an assigned faculty member. The sub-intern is assigned to different faculty members each week for the full subspecialty experience. The sub-intern also participates in an outpatient clinic setting. The sub-intern receives a first-hand experience of what to expect as a neurosurgery resident, but also as an attending in an academic setting.

Conferences are scheduled every Friday from 7 a.m. to 12 p.m. Attendance is mandatory at all conferences. Sub-interns also participate in journal club, didactics and quality improvement and safety conferences. A 20- to 30-minute presentation on a topic of the sub-intern's choice is required on the last week of the sub-internship. This topic should be relevant to your sub-internship experience.

### **PREREQUISITES**

None required. We encourage completion of basic surgical and medical rotations in medical school to make the most out of this rotation. This course is also intended for 3rd-year students enrolled in the undergraduate medical education program at University of California, Irvine School of Medicine (UCISOM).

### **RESTRICTIONS**

This rotation is not accepting international students.

### **COURSE DIRECTOR**

Dr. Sumeet Vadera is Board Certified in Neurological Surgery since 2016. He has worked in higher education since 2007. Dr. Vadera is an Associate Professor, Associate Program Director of Neurosurgery Residency, Director of Epilepsy Surgery, and Director of Epilepsy Surgery Fellowship, in the Department of Neurosurgery, UC Irvine School of Medicine. Dr. Vadera is Fellowship trained in Epilepsy Neurological Surgery at Cleveland Clinic, Cleveland, OH. Dr. Vadera has had 51 publications.

Leslie Weterrings is the course coordinator for 685A course. Leslie has been with the Department of Neurosurgery since September 2016.

### **INFORMATION FOR THE FIRST DAY**

The medical student should arrive at the academic office on the first day, by 7:45am (200 S. Manchester Ave. Suite 210, Orange CA 92868). The medical student will meet briefly and get set up with a badge and an escort to the Parking Department to purchase a parking permit. The medical student will have access to the "triangle" lot directly across the hospital on Chapman Avenue. The medical student will be scheduled for OR orientation at 9:00am at the UCI Medical Center Lobby, 101 The

City Drive South, Orange, CA (Douglas Hospital). Once the one-hour orientation is completed, the student will meet up with the team. The medical student will be scheduled to meet the first or second day with Dr. Sumeet Vadera, Associate Program Director of Neurosurgery Residency to go over expectations for the rotation.

**SITE**

UCI Medical Center

**DURATION**

4-Week rotation

**Scheduling Coordinator:** UCI students please call (714) 456-8462 to make a scheduling appointment.

**Periods Available:** The time of the course must be pre-approved by the elective director at least 3 months prior to the start of the course. No exceptions.

**NUMBER OF STUDENTS ALLOWED**

3 students allowed during each rotation.

**WHAT STUDENTS SHOULD DO TO PREPARE FOR THE COURSE**

Reading material and instructions will be emailed to medical students once scheduled for rotation.

**COMMUNICATION WITH FACULTY**

Questions about logistics and other questions, comments, or concerns about the course can be directed to the Course Director. Contact information and office location are at the beginning of this document.

The Course Director is also available to meet in person. Please email [lweterri@uci.edu](mailto:lweterri@uci.edu) to arrange an appointment. To ensure that your email will not be lost in the large volume of email received, please use the following convention for the subject line:

SUBJECT: COURSE NAME, your last name, your issue (e.g. XXX, Smith, Request for appointment)

## **2. Course Objectives and Program Objective Mapping**

The following are the learning objectives for the 685A course. Students are expected to demonstrate proficiency in these areas in order to satisfactorily complete the course. In addition, the extent of a student's mastery of these objectives will help guide the course evaluation and grade.

<b>Course Objective</b>
Develop skills in neurological examination, functional neuroanatomy, practical interpretation of neuroimaging and the identification of emergent neurological conditions, as well as the medical and surgical management of cranial, spinal and peripheral nerve disease.
Reliably take a patient history, including pertinent neurological review of systems, past medical history, family history and social history.
Reliably perform a general neurological examination, including mental status, cranial nerve, cerebellar, motor, sensory, and reflex subcomponents.
Reliably calculate the Glasgow Coma Score (GCS) for any given patient.
Reliably calculate the functional status of any given patient according to the Karnofsky Performance Scale.
Reliably to identify and neuroanatomically localize common neurological deficits including lobar lesions, brain-stem lesions, myelopathy, radiculopathy and peripheral nerve deficits.
Become familiar with common neurological diseases that must be considered in the differential diagnosis of patients presenting with varying combinations of, and time courses for, neurological symptoms and examination findings.
Become familiar with various tests that are used for neurological evaluation, when these tests are appropriate, as well as their limitations.
Be able to identify the presence of absence of skull fracture, intracranial hemorrhage, hydrocephalus, and/or a lesion causing mass effect on a cerebral neuroimage.
Be able to identify the presence or absence of spinal fracture, spinal cord compression or a significantly herniated disc on a spinal neuro-image.
Become familiar with neurocritical care concepts and monitoring techniques for measuring intracranial pressure, cerebral perfusion pressure, cerebral artery vasospasm, syndrome of inappropriate antidiuretic hormone release, cerebral salt-wasting syndrome, diabetes insipidus, and vasogenic cerebral edema.

Become familiar with the medical and surgical management of neurological emergencies, including acute spinal cord compression, elevated intracranial pressure, intracerebral hemorrhage, seizure and stroke.

Become familiar with the basic types of operations performed to assist in the diagnosis and treatment of patients with neurological disease.

Become familiar with ethical and quality-of-life issues including the loss functional independence, alterations in body image, issues surrounding limitation or withdrawal-of-care decisions, informed consent, and organ donation, which are inherent in major neurological illness and injury, as well as neurological surgery.

Acquire an understanding of some of the most common problems seen by family physicians.

### 3. Course Resources

#### TEXTS AND READINGS: SUGGESTED

Greenberg Handbook of Neurosurgery

### 4. Major Exams, Assignments and Grading

#### MANDATORY SESSIONS

Session Title	Location
Clinic (one per week)	UCI Medical Center, Pav I
Academic Day (Fridays)	200 S. Manchester Ave., Suite 212, Executive Classroom

#### THE GRADING SCALE

Medical Students are graded using the following scale: Honors (H), Pass (P), and Fail (F), or for the MS I courses, Pass (P) and Fail (F).

For the assignment of grades, the average and distribution of scores of only the medical students will be used to establish the score range for each grade. The score of any medical students who has previously taken this Clerkship or any portion will not be included in the calculation of these statistics.

You have 30 days from the date of the grade to appeal any aspect of this grade. Please contact your Clerkship/course Director should you have any questions

## **GRADING**

Medical Students are graded using the following scale: Honors (H), Pass (P), Fail (F) and Incomplete (I). For further information, please review the [Grading Policy](#).

Eighty percent of the rotation grade is determined by the assigned faculty mentor's evaluation of the student's performance during the clerkship. The faculty mentor will solicit input from the other neurosurgical faculty members as well as the house officer(s) and neurosurgical PA's on the inpatient service for consideration in their evaluation.

The student will be evaluated on attendance, participation, knowledge base, clinical skills, motivation, professionalism and interpersonal skills. Twenty percent of the grade is determined by the student's post-test score at the end of the clerkship. The final grade is reported by the clerkship director on a Student Narrative Evaluation Form. This record includes both positive and negative comments in bullet form as well as the student's score on the post-test along with the final grade of honors/pass/fail at the end of the clerkship. The clerkship administrative coordinator is responsible for transmitting the evaluation form to the appropriate School of Medicine administrator.

### ***Requirements for "Pass":***

To receive a grade of Pass, students must demonstrate successful performance in all the following areas:

- Knowledge
- Patient Care
- Practice-Based Learning
- Interpersonal & Communication Skills
- Professionalism
- Systems-Based Practice

### ***Requirements for "Honors":***

To receive a grade of Honors, students must demonstrate exceptional performance in all the following areas:

- Knowledge
- Patient Care
- Practice-Based Learning

- Interpersonal & Communication Skills
- Professionalism
- Systems-Based Practice

*Grounds for “Incomplete”:* You will not be issued a grade until all elements of the course have been completed.

**REMEDIATION**

Remediation, if needed, will be designed by the Course Director to suit the issue at hand.

*Grounds for “Fail”:* You will receive a grade of "Fail" if the requirements for passing the course have not been met. Please refer to the [Grading Policy](#) for the impact of the "Fail" grade to the transcript.