

6850 ORTHOPEDIC SURGERY LABORATORY

This course is available to UC Irvine students only

Course Description:

A course designed to instruct the student in research techniques and acquaint them with research being performed by the Department of Orthopedic Surgery. These ongoing projects include studies in the area of human performance in exercise and sports, muscle performance, evaluation of Orthopedic treatment of spinal cord injury patients, and studies of spinal biomechanics. Students will be encouraged to develop their own projects, and take an active part in projects of the Orthopedic faculty.

Department: Orthopedic Surgery

Prerequisites: UC Irvine students must have successfully completed the basic science curriculum.

Restrictions: UC Irvine students only

Elective Director: Ranjan Gupta, M.D. , UC Irvine Medical Center, Department of Orthopaedic Surgery, 101 City Drive, Pav III, Orange, CA 92868, 714-456-7801, ranjang@uci.edu,

Instructing Faculty: Orthopedic Surgery Faculty

Who to report to on the first day: Nasim Motamedi

Location to report on first day: UC Irvine Medical Center, Department of Orthopaedic Surgery, Pav III, 2nd Floor

Time to report on the first day: 7:30 AM

Site Coordinator: Maria Cristina Lampino Guerrero, Resident Coordinator, UC Irvine Medical Center, Dept. Orthopaedic Surgery, Pavilion III 101 City Drive South, Orange, CA 92868, (714) 456-5547, mlampino@uci.edu

Site: UC Irvine Medical Center

Periods Available: Throughout the year

Duration: 4 to 12 weeks

Number of Students: 1

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

Course Objective: At the end of this rotation the student will be able to:

- To instruct students in research techniques and research being performed.

Key Topics:

- Knowledge of the structure and function of the musculoskeletal system, including the molecular, biochemical and cellular mechanisms for maintaining homeostasis
- Knowledge of the pathogenesis of musculoskeletal diseases, interventions for effective treatment, and mechanisms of health maintenance to prevent disease

Competencies:

- The ability to competently formulate a hypothesis and design a research project

- The ability to competently describe current problems and research arenas in musculoskeletal research
- The ability to articulate a cogent, accurate assessment and plan, and problem list, using diagnostic reasoning skills in musculoskeletal medicine

Attitudes and Commitments:

- Honesty and integrity reflecting the standards of the profession, in interacting with colleagues, patients, families and professional organizations
- Professional behaviors reflecting compassion and respect for patient privacy, altruism and a commitment to comprehensive, holistic medical care
- An understanding of research ethics

Educational Activities: Each student's schedule will vary according to the project design and specific requirements set out by the research advisor for the student.

What Students Should do to Prepare for the Rotation: The student must meet with a preceptor and have a defined research plan that is mutually agreed upon

Course Hours Weekly Summary:

2.0	Conference
1.0	Grand Rounds
37.0	Other: reading, writing, journaling
40.0	Total

Content Theme Integration:

- Biostatistics
- Epidemiology
- Ethics

Required Reading:

- Salter, Robert. Textbook of Disorders and Injuries of the Musculoskeletal System.
- Hoppenfeld, Stanley. Examination of Extremities and Spine.
- Skinner, Harry. Current Diagnosis and Treatment in Orthopedics.

Official Grading Policy: The student will receive a grade of Honors, Pass or Fail. The student's final grade will be submitted on the standard UC Irvine elective form. The student's final evaluation will be derived from input from Attendings and Residents. The student will be evaluated with specific attention to: ethical behavior, reliability and dependability, ability to work with peers and under faculty direction, relationships with nurses and other hospital personnel, relationships with patients, clinical judgment, history-taking and physical diagnosis skills, ability to identify and formulate problems, manual skills, appropriate use of laboratory, quality of patient record, verbal communication skills, personal appearance, use of medical literature, and knowledge of own limitations. If the student fails the elective a grade of "F" will be permanently recorded on his/her transcript. The student can repeat the course for a second grade, however, the "F" will not be removed from the transcript.