

# 655D Clinical Microbiologic Pathology

This rotation is not accepting international students.

**Course Name** Clinical Microbiologic Pathology

**Course Director** Robert A. Edwards, MD, PhD

Elective at a Glance		
<b>Available to:</b> [X] UCI MS3 students [X] UCI MS4 students [X] Extramural Student		
<b>Duration:</b> 1 or 2 weeks	<b>Number of Students:</b> 2	<b>Grading:</b> H / P / F
<b>Periods available:</b> Throughout the year, based on instructor/lab staff available		

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

### FACULTY AND STAFF

Name	Office Location	Phone	Email
Course Director: Robert A. Edwards, MD, PhD	Medical Sciences D449	949-824-8576	<a href="mailto:redwards@hs.uci.edu">redwards@hs.uci.edu</a>
Course Coordinator: Ashley Dunncliffe	Medical Sciences D440	949-824-5367	<a href="mailto:pathelectives@hs.uci.edu">pathelectives@hs.uci.edu</a>

### DESCRIPTION

Rotations in areas of Bacteriology, Molecular Microbiology, Mycology, Mycobacteriology, Parasitology and Serology. Participation in clinical and technical activities of the division. Involvement in the processing and evaluation of clinical specimens in relation to patient care. Clinical correlations presented at Infectious Disease Laboratory Rounds.

### PREREQUISITES

UCI students must have successfully completed the MS1 and MS2 years. Extramural students must be in the final year of undergraduate medical education and have completed course work equivalent to UCI's Clinical Pathology and General Pathology courses.

### RESTRICTIONS

**Students must obtain permission from faculty (Dr. Bittencourt or Dr Khan) at least two months prior to the planned elective.** Availability of the rotation depends on other teaching obligations during the requested period. This rotation is not accepting international students.

**COURSE DIRECTOR:** Robert A. Edwards, MD, PhD,

**Instructing Faculty:** Dr. Cassiana Bittencourt, Dr. Ayesha Khan, & staff

**Elective Coordinator:** Ashley Dunncliffe

**INFORMATION FOR THE FIRST DAY**

**Who/Location/Time to Report to on First Day:** at least a week before the rotation this information will be sent to you.

**SITE:** UCI Medical Center, Building 54

**DURATION:** 1-2 weeks

**Scheduling Coordinator:** UC Irvine students please email [comsched@hs.uci.edu](mailto:comsched@hs.uci.edu) to make a scheduling appointment.

Extramural students enrolled at a U.S. LCME medical school must use VSAS to apply. To apply please refer to the [Visiting Student Learning Opportunities](#) website.

**Periods Available:** Throughout the year but will depend on the availability of the instructors and laboratory staff. 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:** 2

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

Review clinical pathology, medical microbiology and immunology medical school courses.

**COMMUNICATION WITH FACULTY:**

Questions about logistics should be directed to the Course Coordinator. Direct 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 [pathelectives@hs.uci.edu](mailto:pathelectives@hs.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. 655D, Smith, Request for appointment)

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

The following are the learning objectives for the 655D 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>	<b>Mapped UCI School of Medicine Program Objective</b>	<b>Sub Competency</b>	<b>Core Competency</b>
Basic Understanding of diagnostic bacteriology			
Basic Understanding of diagnostic mycobacteriology			
Basic Understanding of diagnostic mycology			
Basic Understanding of diagnostic virology			
Basic Understanding of diagnostic serology			
Basic Understanding of diagnostic parasitology			
Basic Understanding of diagnostic molecular microbiology			

**Key Topics:**

- Diagnostic bacteriology
- Susceptibility testing
- Diagnostic mycobacteriology
- Diagnostic mycology
- Diagnostic virology
- Diagnostic molecular microbiology
- Diagnostic parasitology
- Clinical serology
- Specimen processing
- Direct microscopic examination of specimens.

**Competencies:**

- Clinical indications for ordering microbiology tests available, their limitations and strengths.
- Requirements for collection and transportation of clinical specimens for microbiology.
- Handling and processing of clinical specimens in the microbiology laboratory.
- Interpretation of microbiology laboratory tests.

**Attitudes & Commitments:** The student will demonstrate honesty and integrity reflecting the standards of the profession.

### 3. Course Resources

**TEXTS AND READINGS: Recommended**

Selected in accordance with objective and diagnostic material.

### 4. Major Exams, Assignments and Grading

**MANDATORY SESSIONS**

- Lecture/Small Group Discussion
- Bench assessment
- Micro rounds

**Course Hours Weekly Summary:**

#	Hours	Computer Assisted Instruction
2-4	Per week	Lecture
1-5	Per week	Laboratory Rounds
1-2	Per day	Bench assessment
1	Per week	Micro Rounds
1-2	Per day	Other: reading, writing, journaling
<b>30-40</b>	<b>Per week</b>	<b>Total</b>

**Content Theme Integration:** Evidence Based Medicine

**MAJOR ASSIGNMENTS AND EXAMS:**

**Educational Activities:** A general overview of Diagnostic Microbiology may have a rotation as outlined below. However, a more tailored rotation depending on the background of the student may be more focused on a particular area.

**Example of a general rotation:**

- Day 1: Central processing area
- Day 2: Blood cultures
- Day 3: Antimicrobial susceptibility testing
- Day 4: Urine cultures
- Day 5: Respiratory cultures
- Day 6: Genital and stool cultures
- Day 7: Anaerobic cultures
- Day 8: Mycology
- Day 9: Parasitology
- Day 10: Molecular Microbiology & Serology

**Procedures to be Learned by the Student:** Handling and testing of clinical specimens in the diagnostic microbiology laboratory.

**GRADING**

**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 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.