655D CLINICAL MICROBIOLOGIC PATHOLOGY

Students must obtain permission from the course coordinator who will obtain faculty approval based on availability prior to enrollment in this course a minimum of two months prior to expected enrollment.

Course Description: Rotations in areas of Bacteriology, Molecular Microbiology, Mycology, Mycobacteriology, Parasitology, Serology and Virology. 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.

Department: Pathology & Laboratory Medicine

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. Peterson) 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.

Elective Director: Robert A. Edwards, MD, PhD, UCI School of Medicine, Department of Pathology & Laboratory Medicine, Med Sci I, Room D435, Irvine CA 92697, 949-824-8576, redwards@uci.edu

Instructing Faculty: Dr. Luis de la Maza, Dr. Ellena Peterson, & staff

Course Website: Will be accessible during the rotation

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

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

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

Elective Coordinator: Ashley Dunnicliffe, UC Irvine School of Medicine, Department of Pathology & Laboratory Medicine, Med Sci I, Room D440, Irvine, CA 92697-4800, (949) 824-5367, pathelectives@hs.uci.edu

Site: UCI Medical Center, Building 54

Periods Available: Throughout the year but will depend on the availability of the instructors and

laboratory staff.

Duration: 1-2 weeks Number of Students: 2

- UCI students must officially enroll for the course by contacting the Scheduling Coordinator via email pathelectives@hs.uci.edu UC Irvine students please call (714) 456-8462 to make a scheduling appointment after receiving approval.
- Extramural students enrolled at a U.S. LCME medical school must use VSAS to apply. To apply please refer to this the <u>VSLO website</u>
- For any questions regarding this rotation, please contact Ashley Dunnicliffe, UC Irvine School
 of Medicine, Department of Pathology & Laboratory Medicine, Med Sci I, Room D440, Irvine,
 CA 92697-4800, (949) 824-5367, pathelectives@hs.uci.edu

Course Objectives: Depending on the areas of interest chosen by the student, at the end of this rotation the student will have:

- a basic understanding of diagnostic bacteriology
- a basic understanding of diagnostic mycobacteriology

- a basic understanding of diagnostic mycology
- a basic understanding of diagnostic virology
- a basic understanding of diagnostic serology
- a basic understanding of diagnostic parasitology
- a 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.

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 and 3: Blood cultures and antimicrobial susceptibility testing
- Day 4: Urine and respiratory cultures
- Day 5: Genital and stool cultures
- Day 6: Virology
- Day 7: Parasitology
- Day 8: Mycology
- Day 9: Molecular Microbiology
- Day 10: Serology

What Students Should do to Prepare for the Rotation: Review clinical pathology, medical microbiology and immunology medical school courses.

Clinical Responsibilities of the Student: This is not a clinical rotation.

Patient Care Responsibilities: This is not a clinical rotation.

Call Schedule of the Student: This is not a clinical rotation.

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

Percentage of Time Student will Participate in Ambulatory Setting: This is not a clinical rotation.

Conference/Lecture/Small Group Sessions: There are standard lectures and online teaching materials.

- Bacteriology
- Susceptibility testing
- Virology and Molecular Microbiology

Course Hours Weekly Summary:

	Computer Assisted Instruction
2-4 hr/wk	Conference
2 hr/wk	Laboratory Rounds
4 -6 hr/day	Laboratories
2-4 hr/wk	Lecture
1-2 hr/day	Other: reading, writing, journaling
30-40 hr/wk	Total

Content Theme Integration:

Evidence Based Medicine

Recommended Reading: Selected in accordance with objective and diagnostic material.

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 UCI elective form. Based upon attendance, initiative and course knowledge. Students will be expected to make one oral presentation on a select topic and pass a written examination. 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.