Title of Clerkship: Research in Infectious Diseases

Elective Type: Fourth Year Elective

Department: Medical Microbiology and Immunology

Clerkship Site: The University of Toledo Medical Center

Course Number: BSCI 782

Blocks available: Any time except August through November

Number of students per block: One to three

Faculty: Isabel Novella, Robert Blumenthal, Jason Huntley

Elective Description/ Requirements: Students will participate in a combination of laboratory research, literature studies, and small group meetings, which are all to be focused on immunological disease(s) of their own interests. Students will be expected to acquire fundamental skills required for generating testable hypotheses, carrying out bench research, and analyzing the data.

Length of Clerkship: 4 weeks

Links to EPOs Educational Course Objectives:

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

- K1 Describe basic science of normal structure and function of the body and organ systems
- K2 Apply basic science knowledge to mechanisms that are important in maintaining the body's homeostasis
- K3 Explain basic science of various causes of diseases and disorders
- K4 Apply basic science knowledge to altered structure and function of the body and major organ systems
- K5 Apply basic science knowledge to clinical, laboratory and pathologic manifestations of common diseases
- K6 Describe pharmacologic basis for therapeutics
- K7 Apply basic science knowledge to clinical problems
- K8 Develop a research hypothesis and study design; analyze data, including statistical methods
- S1 Effectively communicate, both orally and in writing, the results of the study
- S7 Interpret results of commonly used basic science diagnostic procedures
- S11 Perform a literature search on the topic of interest
- P1, P3 Meet standards for professionalism in dress and grooming, and in personal interactions with research colleagues, faculty and staff
- P4 Demonstrate honesty, integrity, and professionalism in the performance, interpretation, and presentation of research

Professionalism: UTCOM students will meet or exceed the institutional standards for professionalism as stated in the current Educational Program Objectives and the current Educational Course Objectives for the Sponsoring Department.

Instructional Methods: Independent study
- Literature study
- Problem solving exercises
- Lectures/PowwerPoint presentations

Evaluation methods employed: Students must submit an abstract, a manuscript, or a 3-5 page narrative summary of their work

Prerequisites: Successful completion of Year 1 and 2

Clerkship Director: Isabel Novella Ph.D.

Clerkship Coordinator: Traci McDaniel

Phone Number: 419-383-5423

Email: Traci.mcdaniel@utoledo.edu

Special Requirements: Each student must work with one or more research mentors to develop a brief description of the proposed project and activities during the clerkship. The elective description using this standard format must receive initial approval by the department chair. Final approval must be given by the Associate Dean for Clinical Undergraduate Medical Education, Professionalism, and Diversity.

AAMC Hot Topics Addressed in this Elective Clerkship:
(please make selection from attached Hot Topic list)

- Evidence Based Medicine (11)
- Collection and analysis of data (35)
- Research methods (36)