Title of Clerkship: Pathogenesis of Immunological Diseases

Elective Type: Fourth Year Elective

Department: Medical Microbiology and Immunology

Clerkship Site: The University of Toledo Medical Center

Course Number: BSCI 781

Blocks available: Any time except August through November

Number of students per block: One to three

Faculty: Akira Takashima, Kevin Pan, Mark Wooten, Randall Worth

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

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/PowerPoint 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: Akira Takashima, M.D., Ph.D.

Clerkship Coordinator: Traci McDaniel
Phone Number: 419-383-5423
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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:

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