ME.680 (MOLECULAR AND COMPARATIVE PATHOBIOLOGY)

Courses

ME.680.700. One Medicine Research Seminar Series. 1 Credit.
One hour seminars by Johns Hopkins Faculty and outside guest speakers dealing with naturally occurring diseases of animals that relate to medical research and human disease, and with animal models of human disease.

ME.680.703. Animal Pathology Laboratory. 18 Credits.
Limited number of persons serve as prosectors on the animal pathology diagnostic service. This entails responsibility for gross and microscopic examination of diseased animals and tissues submitted for diagnosis by investigators with the institutions, by practicing veterinarians, by the Maryland Zoo in Baltimore, and the National Aquarium in Baltimore. Complete necropsy and histopathology laboratories are available and prosectors work under close faculty supervision. Rotational assignments may vary according to schedules.

ME.680.710. Clinical Conference in Laboratory Animal Medicine. 3 Credits.
Weekly conferences in clinical laboratory animal medicine and clinical pathology. Attendance by comparative medicine and comparative pathology fellows is expected. The course is open to all other students, fellows and faculty.

ME.680.711. Comparative Pathology Conference. 3 Credits.
Weekly one hour diagnostic slide conference focuses on the discussion of histologic and electron microscopic examples of unknown cases drawn from a wide variety of animal species. Cases are available for study during the week preceding the conference. Participants describe the cases, give differential diagnoses, and discuss etiology and pathogenesis with the guidance of faculty members.

ME.680.712. Mouse Pathobiology and Phenotyping: Enhancing Rigor and Reproducibility in Translational Research Involving Mice. 2 Credits.
This course is intended for graduate students or postdocs at any level who currently work with or expect to work with mouse models and genetically engineered mice. This course offers up to 34 contact hours: 11 hr Laboratory sessions and 23 hr Lectures. The four (4) hands-on laboratory sessions include clinical and physical examination of mice, specimen collection, clinical pathology and anatomic pathology. Familiarity with basic anatomy is expected for participation in laboratory sessions. SOM graduate students registered to take this course FOR CREDIT must participate in laboratory sessions. Postdocs and auditors should contact the course director (Dr. Cory Brayton) to waitlist for lab session availability.

ME.680.713. Regulations that Govern Animal Research. 1 Credit.
Federal legislation dictates how scientists can use animals in research, and is supplemented by a number of guidelines that institutions must follow in order to receive NIH funds. This course systematically reviews the laws and regulations that govern animal research, and is especially suitable for veterinarians preparing to sit for American College of Laboratory Animal Medicine board exam and for members of the Institutional Animal Care and Use Committee.

ME.680.714. Systems Pathology of Animals. 1 Credit.
This course will cover essential knowledge on the pathology of domestic and laboratory animals with an emphasis on covering material most relevant to anatomic pathology boards. Diseases are organized by system, including: alimentary, hepatobiliary/pancreatic, respiratory, cardiovascular, urinary, endocrine, bone marrow/blood, nervous, skeletal muscle, skeletal, integument, reproductive (male and female), and the ear and eye. The lectures are geared towards veterinarians pursuing specialty training in anatomic pathology, but may be of interest to select pre-veterinary, veterinary and graduate students, research and veterinary technicians and biomedical researchers.

This course will cover essential knowledge on the biology, husbandry, management and medicine of animals in a research setting, and familiarize participants with common animal models for human disease. The lectures are geared towards veterinarians pursuing specialty training in laboratory animal medicine, but may be of interest to select pre-veterinary, veterinary and graduate students, research and veterinary technicians and biomedical researchers.

ME.680.802. Journal Club for Laboratory Animal Medicine Board Review. 1 Credit.
Weekly journal club for Laboratory Animal Medicine Board review.

ME.680.803. Journal Club for Laboratory Animal Medicine Board Review. 1 Credit.