HISTOLOGY FOR TOXICOLOGIC PATHOLOGY 16:963:502

Course Directors: Dr. Ken Reuhl

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Office hours as needed

Course Objectives: The primary objective of this course is to give students working familiarity with the structure (gross and microscopic) of the major tissues of the mammal. Ability to recognize tissue types by light microscopy will be essential for successful completion of the Toxicological Pathology course.

The Histology Course consists of lectures supplemented by self-instruction via microscope slides, gross specimens, CD instructional aids, web-based histology sites and textbooks/atlases. The faculty will be available for tutorials, one-on-one instruction, and review.

The Histology and Toxicologic Pathology courses are considered to represent a course sequence and exercises for both courses are scheduled across the academic year. Among the exercises scheduled for the year are:

- --training in the use of the light microscope
- --small mammal necropsy and 'diagnosis' of unknown toxicant
- --necropsy of alternative species (fish, invertebrates)
- --tissue preparation, microtomy and staining
- --immunofluorescence and special techniques microscopy
- --elective human autopsy at Middlesex Medical Examiner's Office

LECTURE SCHEDULE

| Topics | Instructors |
|------------------------------------|-------------|
| Epithelium | K. Reuhl |
| Connective Tissues | K. Reuhl |
| Hepatobiliary System | K. Reuhl |
| Urinary System | K. Reuhl |
| Cardiovascular System | K. Cooper |
| Respiratory System | K. Cooper |
| Gastrointestinal System | K. Reuhl |
| Endocrine and Reproductive Systems | M. Gallo |
| Skin | K. Reuhl |
| Clinical Chemistry | M. Goedken |
| Nervous System | K. Reuhl |
| Comparative Histology | K. Cooper |
| Labs | |
| Necropsy Lab | |
| Comparative Pathology Lab | |
| Special Techniques Lab | |