

Pathology and Laboratory Medicine

Pathologists play many roles in medicine, from interpreting surgical biopsies to supervising clinical laboratory testing. It has been estimated that 70% of all medical decisions are based on data generated by pathology departments. The department of Pathology and Laboratory Medicine at KUMC plays an integral role in the core curriculum and also offers elective courses to medical students interested in learning more about laboratory practice. Students in elective rotations participate in daily teaching conferences and specimen "sign-out" at the University of Kansas Hospital. They receive hands-on exposure to pathology technical methodology in the surgical pathology suite, cytopathology and hematopathology.

PAON 920. Molecular Medicine: Approaches & Ethics. 2 Credits.

Molecular Medicine: Approaches & Ethics is a two semester course for first year MD-PhD students taught by the Director of the MD-PhD Program, with other faculty from the basic science and clinical departments. Through lectures, small group discussion, online modules, evaluation of primary literature, and presentations/discussions with current KUMC faculty, students will be introduced to the process of scientific investigation. Throughout both semesters, students will be exposed to diverse research methods and model systems used to investigate the molecular basis of disease. In the first semester, there will be particular emphasis on the key elements of achieving scientific rigor and reproducibility, including experimental design, bias, and data analysis. In the second semester, there will be emphasis on ethical principles guiding responsible scientific investigation. Students are evaluated by both group activity and individual preparation and participation. Prerequisite: Enrollment in the MD-PhD Program.

PAON 921. Diagnostic Pathology. 4 Credits.

This elective will introduce students to the practice of pathology, the role of the pathologist in diagnosis and management and provide exposure to several subspecialty areas within the pathology department. An effort will be made to tailor the elective experience to the needs and interests of the individual student, including those interested in pathology as a career, and those interested in broadening their understanding of pathology in general, or in relation to their chosen field. The course consists of a two-week rotation in surgical pathology/autopsy and one-week rotations in hematopathology and cytopathology. In surgical pathology, students will have the opportunity to participate in: supervised prosection of surgical cases, frozen section evaluations, ancillary techniques and diagnostic sign-out of cases with the attending staff. Participation in autopsy procedures will take place as available. In hematopathology, the student will participate in the diagnosis of blood and bone marrow disorders and take part in daily sign-out of bone marrow biopsy specimens. In cytology, the student will assist in the work up and sign out of gynecologic and non-gynecologic cytologic specimens and participate in FNA procedures. At the end of the rotation each student will present a case in PowerPoint format to faculty and residents. Final grade is based on attendance, participation in daily activities, knowledge of general concepts and practice of pathology, and final case presentation. Prerequisite: Completion of core clinical clerkships.

PAON 922. Special Topics in Pathology. 4 Credits.

This rotation affords the student the opportunity to spend four weeks focused on a particular subspecialty of pathology or a pathology-based research elective. The department has subspecialists in dermatopathology, neuropathology, renal pathology, breast pathology

and hepatic pathology. The rotation consists of daily interpretation of subspecialty biopsies, participation in subspecialty conferences, slide set study, and assigned readings. Students participate in their own learning by setting their rotation objectives with faculty at the start of their elective and following through with a schedule of clinical, laboratory and core lecture conferences. Students will need to obtain the appropriate staff members' permission for the rotation as follows: dermatopathology (Garth Fraga); neuropathology (Kathy Newell); renal pathology (Timothy Fields); breast pathology (Fang Fan); hepatic pathology (Maura O'Neil). Prerequisite: Completion of the core clinical clerkships and permission of the faculty.