Objective

The objective of this course is to introduce the students to the principles used by the cytopathologist to recognize normal and abnormal biologic processes (hormonal states, infectious diseases, neoplasia) through the examination of cellular specimens obtained from a variety of body sites. Major emphasis will be placed on clinical cytologic correlations. Students will review selected cytologic specimens during regular “sign out” sessions. The student will observe the daily activities of laboratory technicians and technologists as they prepare cytologic specimens. There may be opportunities to observe procedures as well.

Areas of Study

The rotation encompasses as many areas of Cytopathology as are practical in one month, including routine cytopathology as well as observing pathologist performed Fine Needle Aspirations (FNA) and Touch Prep diagnosis of sentinel lymph nodes.

Gross & Frozen Section Pathology

In the initial few days, students are stationed in the frozen section room where they shadow and learn from the Pathologist’s Assistants, Pathology Residents and frozen section Pathologist. Time spent in the frozen section room includes participating in selection of appropriate area to examine, slide preparation and finally diagnosis of the area and/or lesion of interest and reporting results to the surgeon in the operating room (OR). Time is also spent in observing gross examination and appropriate sectioning of a variety of simple to complex specimens for processing and final diagnosis.

Cytology preparation

Students will be rotating in the cytology preparation laboratory where they learn about the technical process involved in producing slides for cytological diagnosis and processing. Here they observe various methods of processing cytology specimens (eg., FNA smears and various fluids, including urine and pleural fluids among others), routine staining used for each and cell block preparation.

Cytopathology (Sign out & Intra-Operative Evaluation)

During this assignment, students shadow the resident(s) and Fellow on the cytology service, and sign out with the Cytopathologist on-call. They accompany the team to the clinics or floor to observe the performance of fine needle aspirations, whenever these are ordered. They also participate in intraoperative imprint cytology slide preparation and diagnosis of sentinel lymph nodes.

Evaluation

The staff cytopathologist will evaluate the student using a standardized student evaluation form.