“Mini Biopsy”: Making Diagnoses by Fine Needle Biopsies
With Radiological Correlation

Enrollment Period: Spring 2022

Course Dates: Fri 1/21, Mon 1/31, Fri 2/11, and Tues 2/15 (2-4PM)

Student Max: 5

Class Year: MS1, MS2

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Location: UPMC Shadyside, Division of Cytopathology Cancer Pavilion, 2nd Floor (POB2)
(same location as Herberman Conference Center, but turn right off the elevators for the Cytology Suite, Suite 201 - there is a doorbell to ring for access)

Registration: Via Amp Up during enrollment period

Course Description: This mini-elective will involve 4, 2-hour sessions that introduce the students to fine needle aspiration (FNA) biopsies. The sessions will involve a combination of power point presentations with handouts teaching the students about the essential components of the FNA (radiology and pathology perspectives), interactive case discussions, and hands-on experiences (performance of an FNA, preparation of cytology smears, review of slides under a microscope). The overall goal is to give students an exposure to the FNA biopsy, a chance to experience cytopathology as a specialty, and to demonstrate the pathologic and radiologic perspectives with respect to FNA biopsies.

Objectives:

- To develop an understanding of what an FNA involves and the clinical applications.
- To become familiar with both the cytologic and radiologic approach to diagnosing lesions by FNA.
- To become familiar with how an FNA is performed and how to make cytologic smears.
- To illustrate a variety of cases in which FNA was able to make a diagnosis and impact the clinical management of patients.

Pre-Requisites: None
**Requirements:**
- Active Participation and attendance to all 4 course sessions.
- Reading of handouts and active participation in interactive quiz during final session.

**Session 1 - Introduction to the FNA Biopsy**
- Brief introduction to the course with an overview of the FNA biopsy.
- Hands-on experience in preparation of smears and in performance of the FNA using liver tissue.

**Session 2 - Interactive FNA Case Discussions & Microscope Tutorial**
- Interactive discussion of interesting cases in FNA from a variety of different tissues (lymph nodes, soft tissue, lung, liver, etc).
- Discussion of how ancillary studies can help in making FNA diagnoses (molecular testing, immunohistochemistry, etc).
- Review of FNA slides at the multiheaded microscope to demonstrate how a cytopathologist approaches the diagnosis on a routine basis.
- Introduction to pathology informatics and digital imaging in cytopathology.

**Session 3 - The Radiological Perspective to FNA Biopsies**
- Brief introduction to the radiologic perspective of FNA biopsies with a focus on the indications, complications, and the procedure in different body sites.
- Hands-on experience in how radiology performs the FNA biopsy.

**Session 4 - Interactive Review & Quiz Session**
- Interactive quiz session using a variety of cases that demonstrate the issues taught in the prior sessions. Students will use the knowledge they acquired during the lectures to answer the questions and to develop an approach to answering the questions and scenarios.
- Course wrap up and discussion.