Approaching Pediatric Disease through the Microscope:
A Window into the Role of Pediatric Pathology
In the Diagnosis of Childhood Disease
Mini-Elective
2018

Course Dates: April 6, 13, 20 (Friday) and April 26* (Thursday)
Fridays, 3:00-5:00 PM plus one Thursday
(Makeup day—Friday, April 27, 3:00-5:00 PM)

Maximum Students: 2
Class Year: MS1
Course Director: Jennifer Picarsic, MD
Assistant Professor of Pathology
Sarangarajan Ranganathan, MD
Professor of Pathology

Contact Information: Rhonda Cunningham
Phone: 412-692-5655
cunninghamwicksrl@upmc.edu

Registration: Betsy Nero, Office of Medical Education
betsy@medschool.pitt.edu

Description:
This mini-elective will involve four 2-hour sessions that will introduce the student to pediatric disease, with both macroscopic and microscopic visualization of childhood disease. The sessions will involve a combination of “hands-on” holding of pathologic specimens, double-scoping with the pathologist at the microscope to learn about specific childhood disease entities, hands-on frozen section activities, power point didactics, and clinical-radiology-pathologic correlation at Pediatric Oncology tumor board.

Objectives:
1. To understand how Pediatric Pathology is integral to the practice of Pediatrics
2. To become familiar with the process of tissue specimen handling from biopsy to diagnosis
3. To gain an understanding in how tissue is sampled for pathologic evaluation for specific pediatric disease
4. To learn the basic anatomy of congenital heart malformations
5. To understand process of performing a frozen section
6. To develop an appreciation of the integration between the clinical, radiographic, and pathologic diagnosis in the care of a pediatric oncology patient.

Requirements:
• Participation in all class sessions.
*Note: There will be a makeup day on Friday, April 27th for those that cannot attend the Thursday session.
• Completion of PathXL pediatric pathology online exercises

Pre-Requisites:
None
Course Description:
Approaching Pediatric Disease Through the Microscope: A Window into the role of Pediatric Pathology in the Diagnosis of Childhood Disease

Course Directors: Jennifer Picarsic, MD, Assistant Professor of Pathology and Sarangarajan Ranganathan, MD, Professor of Pathology

Location: Children’s Hospital of Pittsburgh, Department of Pathology

Objectives:
1. To understand how Pediatric Pathology is integral to the practice of Pediatrics
2. To become familiar with the process of tissue specimen handling from biopsy to diagnosis
3. To gain an understanding in how tissue is sampled for pathologic evaluation for specific pediatric disease
4. To learn the basic anatomy of congenital heart malformations
5. To understand process of performing a frozen section
6. To develop an appreciation of the integration between the clinical, radiographic, and pathologic diagnosis in the care of a pediatric oncology patient.

Requirements:
• Participation in all class sessions
• Completion of PathXL pediatric pathology online exercises

Course Outline:
Session 1: Friday April 6 2018, 3:00-5:00 pm Children’s Hospital of Pittsburgh, Department of Pathology
The student will “round” in the pediatric pathology lab by following a tissue specimen from its receipt from the operating room to the pathologist’s microscope in order to become familiar with the process of tissue handling. The student will then have the opportunity to hold in their hands a variety of congenitally malformed hearts, learning the anatomy of these malformations. The student will complete the pre-test PathXL online questions. The student will sit with the pathologist at the multi-headed microscope to review a number of pediatric diseases and discuss the differential diagnosis and implications to patient care and treatment.

Session 2, Friday April 13 2017, 3:00-5:00 pm Children’s Hospital of Pittsburgh, Department of Pathology
The session will include a powerpoint didactic on pediatric congenital heart disease to solidify knowledge learned at the bench in Session 1. The student will have an opportunity to perform a mock frozen section and review their technique with the pathologist. The student will sit with the pathologist at the multi-headed microscope to review pediatric diseases and discuss the differential diagnosis and implications to patient care and treatment.

Session 3, Friday April 20, 2017 3:00-5:00 pm, Children’s Hospital of Pittsburgh, Department of Pathology
The session will include a powerpoint didactic on pediatric oncologic specimens with specific attention on how pathology samples the tissue for microscopic slide assessment, and its implication for prognosis and treatment of the patient. The student will sit with the pathologist at the multi-headed microscope to review pediatric diseases and discuss the differential diagnosis and implications to patient care and treatment.

Session 4 Thursday April 26, 2017, 3:00-5:00 pm, Children’s Hospital of Pittsburgh, Department of Pathology
*Note: There will be a makeup day on Friday, April 27th for those that cannot attend the Thursday session. (The student will not go to the tumor board but can review the cases on Friday).

The session will include completing the post-test questions of the PathXL modules and reviewing answers with the pathologist. The student will review Tumor Board cases with the Pathologist and will then attend the Multi-Disciplinary Tumor Board (4-5pm) with the Pathologist to gain an appreciation of the integration between the clinical, radiographic, and pathologic diagnosis in the care of a pediatric oncology patient.

Course Evaluation:
Each student will be asked to complete an evaluation of the course at its conclusion.