Course Title
Virtual Surgical Pathology

Course/Session Director: Marissa White mwhite44@jhmi.edu 4-3964

Course Coordinator: Nancy Nath nnath2@jhmi.edu

Surgical pathology sign-out faculty:
Liz Thompson ethomp36@jhmi.edu
TBD

Examination Schedule: Last day of the rotation

Course Schedule:
Offering #1 – 3/23/20-4/10/20
Offering #2 – 4/13/20-5/1/20
Offering #3 - 6/15/20-7/2/20
Offering #4 – 7/27/20-8/14/20

Course Description: Online surgical pathology student rotation for medical students who have completed the pre-clinical curriculum. This case-based rotation is designed to simulate a surgical pathology resident experience, and will include remote previewing and sign-out of scanned cases multiple times per week with surgical pathology faculty and/or senior residents. Assigned reading will guide independent or group case previewing. Rotators will also be expected to attend surgical pathology meetings hosted on Zoom including pathology grand rounds, daily QA conferences, live sign-outs, and resident lectures. Rotators will be evaluated at the end of the rotation in the form of a brief 10 minute presentation on a pathology topic and a short assessment.

Course Learning Objectives:
At the end of the course students will:
- Summarize the role of a general surgical pathologist as a member of the multidisciplinary care team
- List the defining histologic features of several common pathologic entities
- Demonstrate how to determine the pathologic stage for an oncologic resection
- Describe how to approach assessing biopsy specimens
**Required Text and Other Materials**


- Additional resources:
  - Robbins and Cotran Pathologic Basis of Disease (strongly recommended)
  - Basic histology text:
    - Wheater’s Functional Histology

**Assignments**

- Assigned case previewing two times per week during weeks 2-5
  - For each previewed case, the student should be prepared to at least discuss the following:
    - What tissue type(s) do you see?
    - What appears abnormal, and why?
    - Does the abnormality appear reactive (secondary to inflammation) or neoplastic, and describe the histologic findings which helped you arrive at that conclusion.
    - If you feel the abnormality represents a neoplasm, attempt to determine the cell type of origin and if you feel it is benign or malignant.
    - *As you become more comfortable with previewing slides, you are encouraged to develop a differential diagnosis*

- e-Lectures
  - Careers in pathology
  - Review of neoplasia histology
  - Review of cancer staging
- Brief 10 minute presentation on any surgical pathology topic

**Required Attendance**

- Pathology resident Zoom lectures (Weekly schedule will be e-mailed in advance)
- Pathology grand rounds – Monday 8:30-9:30 am
- Daily surgical pathology Zoom consensus conference – Monday – Friday, 2pm

**Evaluation and Grading**

A. Formative: How will students know how they are doing in the course?
1. Student will receive formative feedback through discussions during “sign-out”

B. Summative: Indicate the basis for computing course grades and the relative weight of each assignment, exam, etc.

   Participation in required activities and “sign-out” (80%)
   End of rotation presentation (15%)
   Assessment (10 questions) (5%)

**Grading Scale** (grading scale is determined by the School of Medicine.)

- **P** = Student has an average equal to or exceeding 70% and has met all required assignments for the class.
- **U** = Student completion of some examinations or assignments is below passing level. These examinations or assignments must be remediated in order to convert to P.
- **I** = Student has a passing average for the course, but has missed required events, because of illness or emergency. Student should meet with course director to plan remediation.
- **F** = Student has failed significant required elements of the course, or has an average score below the passing level for the course. Student should meet with the course director to plan remediation.

**Expectation and Attendance (?)**

Participation in lectures, discussions, and other activities is an essential part of the instructional process. Students are expected to participate regularly. Attendance at sign out, resident lectures, and pathology grand rounds is **required**. Students must adhere to the school’s attendance policy regarding absences and alerting the appropriate people about missed days.

If you need to miss classes, you are to notify the following individuals of the absence, as far as advance as possible:

1) Marissa White mwhite44@jhmi.edu (Course Director)
2) Nancy Nath nnath2@jhmi.edu

The JHUSOM policy on student attendance in the curriculum is posted on Blackboard. The policy is also available at [http://www.hopkinsmedicine.org/som/students/policies/](http://www.hopkinsmedicine.org/som/students/policies/).

**Weather and Other Emergencies**

The School of Medicine follows Johns Hopkins University policy regarding closure due to weather emergencies. Weather emergencies are available at the phone numbers and website below, as well as on radio and TV broadcasts [http://www.insidehopkinsmedicine.org/weather.pdf](http://www.insidehopkinsmedicine.org/weather.pdf):

Baltimore 410-516-7781  
Outside Baltimore 800-548-9004  
URL: [http://webapps.jhu.edu/emergencynotices](http://webapps.jhu.edu/emergencynotices)
Examinations

????? (not sure how to administer assessment)

Classroom Accommodations for Students with Disabilities
If you are a student with a documented disability who requires an academic adjustment, auxiliary aid or other similar accommodations, please contact the Office of Student Affairs at 410-955-3416. If you have a documented disability that may impact your work in this class, please work to get it documents so that we can get proper accommodation.

Statement of Diversity and Inclusion
Johns Hopkins University is a community committed to sharing values of diversity and inclusion in order to achieve and sustain excellence. We believe excellence is best promoted by being a diverse group of students, faculty, and staff who are committed to creating a climate of mutual respect that is supportive of one another’s success.

Teacher Learner Conduct Policy
The Johns Hopkins University School of Medicine is committed to fostering an environment that promotes academic and professional success in learners and teachers at all levels. The achievement of such success is dependent on an environment free of behaviors which can undermine the important missions of our institution. An atmosphere of mutual respect, collegiality, fairness, and trust is essential. Students should review the JHUSOM Guidelines for Conduct in Teacher/Learner Relationships, located on Blackboard.

Student Honor Code
Students are reminded of the honor code developed by the medical student body, introduced in September 1991, is as follows:

As a student at The Johns Hopkins School of Medicine, I pledge:

- To do my own work and be honest in my interactions with peers, faculty, and staff. This applies to my work on examinations, assignments, and papers as well as work in the laboratory.
- To uphold the high standard of conduct in patient care which has always been maintained by the Johns Hopkins medical community.
- To base my interactions with other students on mutual respect and cooperation.
- To act on infractions of the honor code and to maintain the confidentiality of all parties involved.
- To encourage my peers to uphold this honor code.

It is the expectation that Hopkins students live by this code.

Course Evaluation

Please remember to complete the course evaluation for this course. Evaluations will be required from a rotating sample of 25% of the class. Other students will always have the option of submitting an evaluation if they choose. This will reduce the overall burden of surveys for students. There will be no extra credit for completing the evaluation. If you are in the designated
25%, you will receive an incomplete if the course evaluation is not completed by the time grades are posted for the course. These evaluations are an important tool in the School of Medicine’s ongoing efforts to improve instructional quality and strengthen its programs. The results of the course evaluations are kept anonymous—your instructor will only receive aggregated data and comments for the entire class.

**Bibliography**

**Required:**


**Suggested:**
Junquiera’s Basic Histology Text & Atlas (available for free on AccessMedicine)
Robbins and Cotran Pathologic Basis of Disease 9th Edition (Chapters 1-3)

**Course Outline**

**Introduction to General Surgical Pathology**

For each previewed case, the student should be prepared to at least discuss the following:
- What tissue type(s) do you see?
- What appears abnormal, and why?
- Does the abnormality appear reactive (secondary to inflammation) or neoplastic, and describe the histologic findings which helped you arrive at that conclusion.
- If you feel the abnormality represents a neoplasm, attempt to determine the cell type of origin and if you feel it is benign or malignant.
- *As you become more comfortable with previewing slides, you are encouraged to develop a differential diagnosis*

**WEEK 1**

- Virtually attend Pathology Grand Rounds and all Resident Talks
- View Careers in pathology and review of neoplasia histology e-Lectures
- Review SFM foundation of histology
  - SFM Blood cells and stains – 5 Different stains
  - Muscle, connective tissue, bone, and cartilage
  - Epithelium 1
  - Epithelium 2
- Read Molavi Chapters 1-3 “Using the Microscope/ Descriptive terms in Anatomic Pathology / Infection and Inflammation”
WEEK 2
- Virtually attend Pathology Grand Rounds and all Resident Talks
- Monday: Preview three cases:
- Tuesday: Sign-out cases with attending via Zoom
- Wednesday: Preview three cases
- Thursday: Sign-out
- Friday read Molavi chapters 25 “Salivary gland” and Chapter 22 “Lung” – only sections on normal histology and neoplastic lung

WEEK 3
- Virtually attend Pathology Grand Rounds and all Resident Talks
- Monday: Preview cases 7438 (thymoma), mucoepidermoid carcinoma (submitted for scanning), 7461 (pleomorphic adenoma)
- Tuesday: Sign-out
- Thursday: Preview cases 7545 (lung adenocarcinoma), 7512 (Ddx lung primary versus metastatic bladder ca), 7387 (metastatic leiomyosarcoma to lung)
- Friday: View to Cancer staging e-lecture, read Molavi chapter 11 “Prostate” pp 95-103

WEEK 4
- Monday: Preview prostate needle biopsies (submitted for scanning) and squamous cell carcinoma (submitted for scanning)
- Tuesday: Sign-out
- Wednesday: Preview 7468 (metastatic melanoma), 7436 (neurofibroma), and assign a pathologic stage to a colon cancer (submitted for scanning)
- Thursday: Sign-out

WEEK 5
- Prepare for end-of rotation talk

Website Links
JHH Digital slide set:
https://digital.pathology.johnshopkins.edu
- Login with your personal JHED
mSCOPE tutorial
http://oacapps.med.jhmi.edu/bb/tutorials/mscope_tutorial.mp4

e-Lectures
Located at http://inversus.med.jhmi.edu/

You must be on campus or virtually on campus (VPN) to have access to mSCOPE. You must use the FULL Pulse SecureVPN program and not the web client. Inversus and JHH Digital pathology sites are accessible using your JHED ID as a login.