

**UNIVERSITY OF WASHINGTON
GASTROINTESTINAL, LIVER, AND PANCREATOBILIARY PATHOLOGY
FELLOWSHIP PROGRAM**

Rotation Specific Goals and Objectives and Expectations for Fellow Competencies

The overall organization of the UW GI and Liver Pathology Fellowship includes 50% of time assigned to the GI Mucosal Biopsy Rotation and 50% of time assigned to the Consultation/Conferences rotation.

Goals and Objectives:

GI Mucosal Biopsy Rotation

1. The Fellow is responsible for serving as the back-up person and consultant/mentor for the residents assigned to the service.
2. Case cutoffs: The resident assigned to GI/Liver rotation will review the first 40 or 50 blocks of gastrointestinal mucosal biopsy cases, depending on whether he or she is a first or second year resident, prior to sign out with the GI mucosal biopsy pathologist. The Fellow will either assume responsibility for the remaining blocks, or will assist in assigning some of them, as appropriate, to medical students rotating on the service. In addition, the Fellow will manage any overload of liver biopsies after the resident has dictated 4 biopsies, if a first year resident, or 5 biopsies, if a second year resident, and the Fellow will present these cases to the GI pathology attending.
 - a. On screening day, the Fellow will identify cases that may need special stains, such as "r/o CMV", neutrophilic esophagitis that may require GMS, abnormal lymphoid aggregates or neoplasms that may require immunohistochemical stains, and unexpected findings, such as unexpected neoplasms or ischemia, which may require consultation of attending pathologist. The GI/Liver Pathology Fellow will serve as the consultant to the resident to decide if there is a need to order additional testing or to call back the preliminary diagnosis to clinicians.
 - b. The Fellow will review and write-up (dictate) the diagnosis for all mucosal biopsy cases for which he or she is primarily responsible.
 - c. The Fellow will incorporate special stains with specific comment in diagnostic write-up.
 - d. The Fellow will read standard GI texts or selected primary source materials, such as refereed journal articles, on cases as needed prior to sign out.
 - e. The Fellow is responsible for organizing the GI Mucosal Biopsy Conjoint Conference, held from 12-1 PM on the second and third Thursday of the month. This involves: working with the resident(s) and medical student(s) to assign at least one case to each rotator for presentation and discussion, coordinating the schedule of the conference cases, and presenting cases of interest, as well.
 - f. The Fellow will join the GI Mucosal Biopsy signout for the cases that she or he has prepared and will sit in as much time as possible for other cases.
 - g. The Fellow is on call to the GI Histology laboratory to assist with issues of specimen preparation and quality and to perform the Gross Examination and Description for all endoscopic mucosal biopsy resection specimens.
 - h. The Fellow will discuss and present at least one QA issue over the training year at the AP Division QA conference.
 - i. The Fellow will participate in the UWMC AP Division Blue Box conference.
 - j. The Fellow will be courteous, forthright and honest, communicating clearly to the attending pathologist and referring clinicians regarding issues that may lead to delay in case completion, as well as the expected date of completion.
 - k. The Fellow will ask for time off for vacation or personal leave in advance, coordinating the schedule with the other GI Pathology Fellow, with the AP Chief Resident and with the Fellowship Director.

- l. Unexpected absences due to illness or personal emergencies will be reported by telephone to the receptionist in Anatomic Pathology at 206-598-8400, with explicit instructions to have the information shared with the other members of the GI/Liver Pathology team.
 - m. During any scheduled absences, any uncompleted cases waiting for special tests will be transferred to the responsible attending pathologist for completion and follow-up, or to the Fellowship Director, with clear information regarding the issues that need to be completed for case sign-out.
 - n. The Fellow will be a mentor and example to the residents regarding timely organization, professional behavior, and appropriate consultation.
 - o. The Fellow will meet on a regular basis, at least quarterly, with the Fellowship Director to define specific areas of focus for improvement or for personal attention. The Director will meet with each Fellow at the beginning of the Fellowship year to outline with him or her the specific rotations, projects, and opportunities that can be tailored to meet the Fellow's goals above and beyond the core aims of the Fellowship training.
2. During sign out, the Fellow will:
 - a. Be prepared to discuss diagnosis and medical implications of diagnosis.
 - b. Be familiar with additional clinical history from the online medical record, if needed beyond the information provided on the requisition form.
 - c. Complete cases and follow-up on special studies in a timely fashion.
 - d. Communicate findings to the clinicians or consulting pathologists.
 - e. Coordinate second opinions, as needed, for epithelial dysplasia cases.

**Goals and Objectives,
Consultation/Conferences Rotation**

1. The Fellow is responsible for reviewing and writing up all GI, liver and pancreatobiliary consultation and referral cases sent to the UWMC, which includes material from patients being referred for care and material being sent for a second opinion or additional testing.
3. Cases are to be reviewed and presented to the GI/Liver Attending pathologist within 24 hours of receipt by the Fellow.
4. The Fellow will assemble clinical information, as needed, including contact with the outside hepatologist for relevant liver enzyme and special studies, if the biopsies were obtained by an interventional radiologist and submitted without appropriate history.
5. During sign out the Fellow will be prepared to discuss the diagnosis and the medical implications of diagnosis, including likely interventions and treatment.
6. The Fellow will plan independently the special stains and ancillary studies indicated for resolution of the differential diagnosis and will discuss his or her plan with the attending.
7. The Fellow will learn the CPT codes applicable to each case.
8. The Fellow will follow-up on all special studies in a timely fashion and will contact the managing or consulting physician with preliminary opinions prior to case completion.
9. The Fellow will review diagnoses with the clinicians, as needed, and at the interdisciplinary conferences.
10. The Fellow will prepare cases in advance and will discuss them at the Primary Liver Tumor Clinic, Secondary Liver Tumor Clinic, Liver Transplantation Conference and Pancreatobiliary Multidisciplinary Clinic. The Fellow will integrate additional information learned at the conferences, including imaging data and laboratory testing, into the final reports or into Addendums, as needed, when the conferences provide information that augments, modifies or alters the pathology interpretation rendered at UW Medicine.
11. The Fellow will serve as a consultant to the residents and pathology attending regarding large resection specimens within UW Medicine and will coordinate review of these cases with the GI Pathology Attending, including writing Addendum reports, as needed.

12. The Fellow will prepare at least one 30 minute presentation to the UW Medicine Division of Gastroenterology Frontier in Gastroenterology and Hepatology conference, at the Pathology Journal Club.
13. The Fellow will assist Dr. Melissa Upton in presentations to the GI Fellows in GI Histopathology, which takes place approximately 10 times per year on Friday from 9-10 AM in NE110K.
14. The Fellow will engage in at least one scholarly project leading to publication.
15. The Fellow will be courteous, forthright and honest, communicating clearly to the attending pathologist and referring clinicians regarding issues that may lead to delay in case completion, as well as the expected date of completion.
16. The Fellow will ask for time off for vacation or personal leave *in advance*, coordinating the schedule with the other GI Pathology Fellow, with the AP Chief Resident and with the Fellowship Director.
17. Unexpected absences due to illness or personal emergencies will be reported by telephone to the receptionist in Anatomic Pathology at 206-598-8400, with explicit instructions to have the information shared with the other members of the GI/Liver Pathology team.
18. During any schedule absences, any uncompleted cases waiting for special tests will be transferred to the responsible attending pathologist for completion and follow-up, or to the Fellowship Director, with clear information regarding the issues that need to be completed for case signout.
19. The Fellow will be a mentor and example to the residents regarding timely organization, professional behavior, and appropriate consultation.
20. The Fellow will meet on a regular basis, at least quarterly, with the Fellowship Director to define specific areas of focus for improvement or for personal attention. The Director will meet with each Fellow at the beginning of the Fellowship year to outline with him or her the specific rotations, projects, and opportunities that can be tailored to meet the Fellow's goals above and beyond the core aims of the Fellowship training.

Specific Medical Knowledge in the field of gastrointestinal, liver and pancreatobiliary pathology that is to be acquired during the Fellowship program includes:

- a. Inflammatory conditions
 - i. Criteria for diagnosis of reflux esophagitis
 - ii. Gastritis- including *H. pylori* and NSAID injury
 - iii. Celiac disease
 - iv. Colitis – including distinguishing acute selflimited from idiopathic inflammatory bowel disease
 - v. Differential diagnostic considerations for idiopathic inflammatory bowel disease.
 - vi. Common GI infections -- both immunocompetent and immunocompromised hosts
 - vii. Microscopic colitis and its differential diagnostic considerations.
 - viii. Granulomatous disease of the GI tract.
 - ix. Graft versus host disease of tubular GI tract and liver.
 - x. Ischemia and infarcts.
 - xi. Workup of amyloid of the GI tract and liver.
 - xii. Chronic viral hepatitis, NASH, alcoholic liver disease, PSC, PBC, and drug-injury, including the ability to write a complete microscopic description of the histologic features and the differential diagnostic considerations for each major histologic pattern.
 - xiii. Liver transplant rejection versus recurrent hepatitis.
 - xiv. Ancillary studies of use in the above conditions [histochemistry and immunohistochemistry; ISH (chromogenic and fluorescent), tissue culture and PCR-based pathogen ID, among others]
- b. Neoplastic conditions
 - i. Intestinal metaplasia in the esophagus and gastric cardia and its meaning
 - ii. Grading of epithelial dysplasia

- iii. Squamous cell carcinoma of the esophagus
- iv. Colonic polyps -- including hyperplastic and other serrated polyps, adenomas, inflammatory polyps, hamartomatous polyps
- v. Adenocarcinoma of the tubular GI tract
- vi. Pancreatic adenocarcinoma and other pancreatic ductal epithelial neoplasms, including differential diagnosis of mucinous cystic neoplasm and IPMN, with ability to plan the appropriate immunohistochemical panel.
- vii. Appropriate work up of lymphoproliferative disorders of the GI tract.
- viii. Workup and recognition of pancreatic endocrine neoplasms, pancreatic acinar carcinoma, and solid pseudo-papillary neoplasms of pancreas.
- ix. Workup of unknown primary carcinoma in the liver.
- x. Be able to diagnose liver tumors and tumor like lesions, including focal nodular hyperplasia, hepatic adenoma, hepatocellular carcinoma, and cholangiocarcinoma, and the appropriate immunohistochemical testing.
- xi. Differential diagnosis of vascular neoplasms of the GI tract and liver, including angiosarcoma and epithelioid hemangioendothelioma, and the appropriate immunohistochemical testing.
- xii. Endocrine neoplasms of the tubular GI tract.
- xiii. Appendiceal neoplasms, including terminology of mucinous and endocrine lesions, and their appropriate work-up
- xiv. Gastrointestinal stromal tumors and sarcomas of the GI tract.
- xv. Use of kras mutation testing in colorectal and pancreatic neoplasia.
- xvi. Recognition of morphologic features that suggest the need for testing for HNPCC or MSI colorectal carcinoma, with interpretation of immunohistochemical stains.