



Anatomical Pathology

Contact Information

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Sites

Jewish General Hospital
 Royal Victoria Hospital
 St. Mary's Hospital
 Montreal Neurological Institute and Hospital

Elective Request Instructions

- Please submit **all requests** for Pathology Electives to pathologyteaching.med@mcgill.ca
- Elective dates must correspond with the [McGill's Rotation Block Calendar](#)
- Requests for “overlapping” periods will not be considered
- Electives requests are not accepted during Period 7 at all sites due to the long holiday period (less supervision, less formal teaching and shortened rotation)
- Electives are in **Anatomic Pathology** only. No sub-specialty elective requests are considered.

Elective Description

Clerkship electives in anatomic pathology can serve three roles:

- 1) to introduce students interested in pathology as a career to the role and responsibilities of a pathologist;
- 2) to consolidate core concepts learned in pre-clerkship in preparation for exams, and future training and/or;
- 3) to introduce the role of pathology as it relates to a medical student's interested specialty (example: general surgery, family medicine, internal medicine, dermatology, etc.)

Elective Duration

2, 3 or 4 weeks



Undergraduate Medical Education Elective

Educational Objectives

GENERAL OBJECTIVES

- Actively attend appropriate rounds, to be discussed with specific staff each week (example tumour boards, Morbidity&Mortality) depending on Elective Site.
- Intra-operative consultation: attend at least one intra-operative consultation. Understand the concept of a lymphoma protocol.
- Red-flags: review the concept of critical values in pathology (cases in which direct communication with the clinician is required, e.g. transplant rejection).
- Understand the role of pathology in clinical decision making as it related to oncology and surgical management by attending tumour board meetings and reviewing the basics of cancer staging (TMN).
- Understand the role of grossing (macroscopic examination) of tissue/surgical samples in pathology. Watch either a resident or pathology assistant gross an interesting case.
- Tour the laboratory and gain an understanding of the various steps in tissue processing (reception, grossing, fixation, embedding, cutting, staining).
- Review the importance of receiving accurate clinical information/pertinent history from physician and how this impacts pathologic assessment.
- Have an overview of the McGill anatomical pathology postgraduate program components.

SUB-SPECIALTY OBJECTIVES

Autopsy Pathology (MUHC-RVH Site)

Adult autopsy (including chart review, prosection of organs grossly, microscopic analysis and generation of differential diagnosis for cause of death).

Understand principles of autopsies: why they are done, difference between coroner's case and medical case, how to consent for autopsy, immediate vs. underlying cause of death, role in medicine.

Dermatopathology (MUHC-RVH Site and JGH Site)

Review basic anatomy of skin.

Review histology of common skin conditions: specifically SCC, BCC, melanoma, dermatitis/general inflammatory conditions.

GI Pathology

Review the pathogenesis of colorectal carcinoma, understand the role of pathology in screening (including the various screening modalities).



Review histology of common GI biopsies: Adenomatous polyps, Inflammatory bowel disease, and celiac's, colorectal cancer.

Introduce the concept of tumour staging (solid vs. hollow organ).

GU Pathology

Review screening and role of pathology in the diagnosis of prostate cancer, understand the concept of Gleason scoring.

Gynecologic Pathology

Review screening and role of pathology in the diagnosis of cervical cancer.

Have an overview of how TNM staging relates to management in cervical, ovarian and uterine cancers

Breast Pathology

Review the different diagnostic modalities for breast lesions (FNAC, core biopsy, excision).

Recognize the importance of clinical / imaging correlation with histological interpretation in the management of a patient with a breast lesion.

Appreciate the correlation between the macroscopic and microscopic aspects of selected breast lesions (ex: ductal VS lobular carcinoma, fibroadenoma & Phyllodes, etc.).

Understand the importance of ER/PR marker and Her-2 status and how it relates to patient management.

Understand the concept of sentinel lymph node and its potential issues for surgical pathology (ex: macro- VS micro-metastasis).

Pediatric Pathology (MUHC: RVH Site)

Understand the role of the fetal autopsy in relation to fetal, maternal and placental pathologies.

Understand the role of the pediatric autopsy in relation to specific pediatric pathologies (ex: SIDS), genetic and metabolic syndromes, and its potential value for future pregnancies.

Be able to describe the main gross components of a placenta.

Be able to identify the main tumors of childhood.



Cardiovascular Pathology (MUHC-RVH Site)

Review the pathology findings (both gross and histologic) of heart failure and myocarditis.

Review the findings in acute and healed rheumatic fever and endocarditis (infective, etc.).

Solidify the concept of myocardial infarct and its associated gross and histologic findings.

Pulmonary Pathology (MUHC-RVH Site)

Review lung gross anatomy and microscopic structure.

Recognize important gross features in lung pathology and elaborate a differential diagnosis.

Know the main categories of pathologies affecting the pulmonary system.

Have an overview of different diagnostic modalities in lung pathology (cytology, TTNA, EBUS, resection) and their potential limitations.

Understand the importance of pathology- radiology-clinical correlation in establishing the final diagnosis.

Be familiar with the main types of cancer encountered in lung pathology.

Appreciate the idea of prioritizing neoplastic tissue for molecular studies when appropriate.

Prerequisites

Year 3 and Year 4 of MDCM Program

Scope of Work

Daily hours - 9:00 am to 5:00 pm

Duties & Responsibilities

- Attendance to weekly Monday morning teaching sessions (8:15-Noon).
- Prepare a presentation for the last Monday morning teaching session.

Rounds & Conferences

- Rounds and conferences specific to sub-specialty
- Monday morning black box (8:15 to 10:00 am, September-early June) and academic teaching (10:00 to noon, September to June) or resident run half days (summer months: June to August)



Recommended Reading/Preparation

Recommended readings:

- Kumar et al: Pathologic Basis of Disease, 9th ed (2015); Systemic Pathology chapters.
- Any basic histology textbook



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Undergraduate Medical Education Elective

Anatomical Pathology

Contact Information

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Coordinator	Fida Elsiss	Telephone	N/A
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Site(s)

Lakeshore General Hospital

Elective Description

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- 1) to introduce students interested in pathology as a career to the role and responsibilities of a pathologist;
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Elective Duration

2 to 4 weeks



Undergraduate Medical Education Elective

Educational Objectives

Grossing Techniques: Observe either a resident or pathology assistant perform the gross examination of an interesting case to understand the importance of macroscopic examination in pathology.

Laboratory Processes: Tour the pathology laboratory to gain insight into the sequential steps of tissue processing, including reception, grossing, fixation, embedding, cutting, and staining.

Clinical Information and Pathologic Assessment: Recognize the significance of obtaining accurate clinical information and pertinent history from physicians and understand how this information impacts the pathologic assessment of cases.

Intra-operative Consultation: Attend a minimum of one intra-operative consultation to gain hands-on experience in providing real-time pathological assessments during surgical procedures. Also comprehend the lymphoma protocol, focusing on its application in pathology practice.

Red-Flags in Pathology: Review the concept of critical values in pathology, emphasizing situations requiring immediate communication with clinicians, such as the diagnosis of CMV infection in immunocompromised patients.

Pathology in Clinical Decision-Making: Attend tumor board meetings to understand the pivotal role of pathology in clinical decision-making, especially in oncology. As well, familiarize oneself with the basics of cancer staging, including the TNM classification system.

Molecular Genetics in Pathology: Gain an understanding of the role of molecular genetics in pathology diagnosis, emphasizing its applications and implications in disease characterization.

Overview of Anatomical Pathology Program: Obtain an overview of the components of the McGill Anatomical Pathology postgraduate program, including its structure, curriculum, and opportunities for further specialization.

- Understand principles of autopsies: why they are done, difference between coroner's case and medical case, how to consent for autopsy, immediate vs. underlying cause of death, role in medicine.
- Introduce the concept of tumor staging (solid vs. hollow organ).
- Review the pathogenesis of colorectal carcinoma, understand the role of pathology in screening (including the various screening modalities).
- Review histology of common GI biopsies: Adenomatous polyps, Inflammatory bowel disease, Celiac disease and colorectal cancer.
- Review the different diagnostic modalities for breast lesions (FNAC, core biopsy, excision).
- Recognize the importance of clinical / imaging correlation with histological interpretation in the management of a patient with a breast lesion.
- Appreciate the correlation between the macroscopic and microscopic aspects of selected breast lesions (ex: ductal VS lobular carcinoma, fibroadenoma & Phyllodes, etc.).
- Understand the importance of ER/PR marker and Her-2 status and how it relates to patient management.



- Understand the concept of sentinel lymph node and its potential issues for surgical pathology (ex: macro- VS micro-metastasis).

Prerequisites

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Scope of Work

Daily hours - 9:00 am to 5:00 pm

Duties & Responsibilities

- Prepare a presentation toward the end of rotation.

Recommended Reading/Preparation

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