Senior Anatomical Pathology Elective Rotation (“Junior Staff”)

This rotation occurs in the final years of the program. The major objective of this rotation is for the senior resident to assume added responsibility, and function almost as would a junior staff pathologist, with minimal requirement for staff supervision. In this way, the resident will be prepared for the demands of independent practice.

Senior residents receive the surgical pathology workload of a staff pathologist several times per week, and are expected to work up (including ordering special stains, submitting additional tissue, obtaining more history, requesting QA opinions from other staff, etc.) and dictate cases on their own, prior to giving them to the staff pathologist for review and verification. Residents are also assigned one day per week to supervise the gross room (including supervising the morning gross rounds) and another day on frozen section duty.

On frozen section days, residents should attend frozen sections (intraoperative consultations), clinical information and review the slides. The senior resident is responsible for giving a final diagnosis to the surgeon.

Senior residents are expected to assume teaching responsibilities for junior residents, medical students and others. They may be asked to supervise gross rounds for a staff pathologist or present cases at interdisciplinary rounds.

Medical Expert:

**General Requirements:**
- Demonstrate the ability to efficiently handle a significant workload of surgical pathology cases, with minimal staff assistance (i.e. at a “junior staff” level)
- Demonstrate diagnostic and therapeutic skills for ethical and effective patient care.
- Access and apply relevant information to clinical practice.
- Demonstrate effective consultation services with respect to patient care, education and legal opinions.

**Specific Requirements:**
- Demonstrate knowledge of normal anatomy, physiology and biochemistry.
- Demonstrate understanding of the general principles of embryologic development and the commoner variations of normal.
• Demonstrate a superior and detailed knowledge of the normal gross and light microscopic appearance of tissues.
• Demonstrate knowledge of the normal ultrastructural appearance of tissues.
• Understand the basic principles of cell biology, immunology and pathogenesis, and the changes that occur in disease states.
• Understand the principles of tissue processing and the use of different fixatives in the laboratory.
• Demonstrate an in-depth knowledge of the appropriate dissection and sampling of surgical specimens. Residents must demonstrate a detailed in-depth knowledge of the microscopic appearances of diseased tissues. This will include all types of tissue and all types of disease appropriate to the experience of a general anatomical pathologist.
• Understand the principles of immunocytochemical diagnosis in neoplastic and non-neoplastic conditions.
• Understand the principles of nucleic acid-based molecular biology techniques, including in situ hybridization techniques, and be familiar with their application to diagnosis in anatomical pathology.
• Demonstrate knowledge of the principles of fluorescent microscopy.
• Understand the principles of ultrastructural diagnosis of neoplastic and non-neoplastic disease
• Demonstrate the ability to prepare and diagnose frozen sections and be conversant with the preparation of imprint cytology specimens and the value and limitations of these in clarifying the diagnosis, both at the time of frozen section or later.
• Demonstrate knowledge of the use and indications for special staining and the technical principles underlying these. Residents must demonstrate familiarity with the technical and diagnostic aspects of decalcified and undecalcified sections in the diagnosis of bone disease.
• Demonstrate ability to take high quality gross and microscopic photographs
• Demonstrate principles of and indicators for in situ hybridization studies.
• Conduct a complete postmortem examination, with appropriate full description and diagnosis at gross and microscopic levels and interpret the findings in the context of the clinical history.
• Dissect and sample surgical specimens appropriately.

Communicator

General Requirements:
• Establish effective relationships with patients/families and with consulting physicians and surgeons.
• Obtain and synthesize relevant history from patients/families/communities.
• Listen effectively.
• Discuss appropriate information with patients/families and the health care team.

Specific Requirements:
• Assist in the continuing education of physicians and other members of the hospital staff, particularly more junior pathology residents and medical students
• Act as consultants to clinical colleagues on the interpretation and relevance of pathological findings, with particular regard to their significance in the management of the patient.
• Understand the information pathology should provide in a given clinical situation and
be able to communicate it effectively in an oral and written form.
- Convey the results of frozen section interpretation to the surgical team, and determine whether these results are in accordance with the clinical circumstances

**Collaborator**

**General Requirements:**
- Consult effectively with other physicians and health care professionals.
- Contribute effectively to other interdisciplinary team activities.

**Specific Requirements:**
- Must have experience in clinical medicine and surgery sufficient to achieve a sound understanding of the effects of disease and the role of pathology in its management.
- Demonstrate the ability to advise on the appropriateness of obtaining histologic and cytologic specimens and following examination of these, to advise on further appropriate investigations.

**Manager**

**General Requirements:**
- Utilize resources effectively to balance patient care, learning needs, and outside activities.
- Allocate finite health care resources wisely.
- Work effectively and efficiently in a health care organization.
- Utilize information technology to optimize patient care, life-long learning and other activities.

**Specific Requirements:**
- Demonstrate knowledge of the principles of laboratory management and administration.
- Demonstrate knowledge of the methods of quality control in the laboratory.
- Demonstrate knowledge of the methods for professional quality assurance as applied to anatomical pathology.
- Demonstrate competence in basic computer skills with emphasis on automated electronic reporting, electronic communication and search strategies.

**Health Advocate**

**General Requirements:**
- Identify the important determinants of health affecting patients.
- Contribute effectively to improved health of patients and communities.
- Recognize and respond to those issues where advocacy is appropriate.

**Specific Requirements:**
- As members of an interdisciplinary team of professionals responsible for individual and population health care, the anatomical pathologist will endeavour to ensure that laboratory practices and test selection are regularly evaluated to determine that they meet these community needs.
• Reinforce to the public and to the profession the essential contribution of laboratory medicine to health.
Scholar

General Requirements:
• Develop, implement and monitor a personal continuing education strategy.
• Critically appraise sources of medical information.
• Facilitate learning of patients, house staff/students and other health professionals.
• Contribute to development of new knowledge.

Specific Requirements:
• On completion of the residency program in anatomical pathology, the resident will be able to:
  • propose a research question relevant to anatomical pathology;
  • develop a proposal to solve the research question;
  • conduct an appropriate literature search based on the research question;
  • identify, consult and collaborate with appropriate content experts to conduct the research;
  • propose a methodological approach to solve the question;
  • carry out the research outlined in the proposal;
  • defend and disseminate the results of the research;
  • identify areas for further research that flow from the results
• NOTE: Residents should have completed the research expectations at this point in residency.
Professional

General Requirements:
• Deliver highest quality care with integrity, honesty and compassion.
• Exhibit appropriate personal and interpersonal professional behaviours.
• Practise medicine ethically consistent with obligations of a physician.
• Demonstrate the knowledge, skills and attitudes relating to gender, culture, and ethnicity pertinent to anatomical pathology.

Specific Requirements:
• Act as an appropriate role model for students and others.
• Demonstrate a professional attitude to colleagues, as well as to other laboratory staff.
• Have an appreciation of the crucial role of the anatomical pathologist in providing quality patient care. This will include knowledge of individual professional limitations and the necessity of seeking appropriate second opinions.