RESIDENT SUPERVISION AND GRADUATED RESPONSIBILITIES
ANATOMICAL PATHOLOGY

Surgical Pathology:
All final diagnoses of microscopic materials in surgical pathology are established by
the attending staff or reviewed by the attending staff before release to the clinician
and medical record. In addition to attending faculty, there are Pathology Assistants in
the Surgical Pathology Gross Lab that will instruct and assist the residents
concerning the gross examination and description of tissues and organs and the
proper selection of tissues for sectioning and microscopic examination. Qualified
senior residents may provide preliminary pathology diagnoses, provided that clinical
staff is told that these are preliminary diagnoses that may be altered by the attending
physician. Until a resident has received approval to do so (see graduated
responsibility below and policy), frozen sections are reviewed by a faculty member
prior to reporting to the clinician/surgeon. In this way, residents in surgical pathology
are highly supervised.

Autopsy Pathology:
All final diagnoses of gross and microscopic materials in autopsy pathology are made
by the attending staff or reviewed by the attending staff before release to the clinician
and medical record. Senior residents may provide preliminary diagnoses, provided
that clinical staff is told that these are preliminary diagnoses that may be altered by
the attending physician. In this way, residents in autopsy pathology are highly
supervised.

Note: Pathology is a unique discipline in clinical medicine where the major pathology
“product” is the gross or microscopic “diagnosis”, “consultation”, or “interpretation.”
Because the assignment of a diagnosis or interpretation via consultation in AP is a
specific event in time (e.g., either the report has or has not been released), the
attending faculty have the opportunity to provide very high levels of supervision of the
residents to ensure proper medical care of the patients.
GRADUATED RESPONSIBILITY

There is a Policy in place for Graded Resident Competencies in Anatomical Pathology. The following is a generalized overview of the usual progression of resident graduated responsibility. Additionally, senior level residents may earn privileges to perform even more independent functions, as approved by the faculty.

Post-graduate medical education in pathology is based on the principle of progressively increasing levels of responsibility in the diagnosis and management of tissues and laboratory tests that concern both inpatients and outpatients under the supervision of the faculty. The faculty are responsible for evaluating the progress of each resident in acquiring the skills necessary for the resident to progress to the next level of training. Factors considered in this evaluation include the resident’s clinical experience, judgment, professionalism, cognitive knowledge, and technical skills. These levels are defined as postgraduate years (PGY) and refer to the clinical years of training that the resident is pursuing. At each level of training, there is a set of competencies that the resident is expected to master. As these are learned, greater independence is granted to the resident in the routine diagnosis and management of pathology cases at the discretion of the faculty who, at all times, remain responsible for all aspects of the diagnosis and management of the pathology cases. Examples of expected competencies and responsibilities for each level follow.

PGY 1 (TTD and Foundation)

**EPAs: TRANSITION TO DISCIPLINE STAGE**
1. Participating in basic specimen handling
2. Summarizing relevant clinical information for clinicopathologic correlation
3. Demonstrating basic skills in microscopy
4. Creating a personal teaching and learning plan

**EPAs: FOUNDATIONS STAGE**
1. Performing gross dissection of simple surgical specimens from accessioning to submission of blocks
2. Microscopic reviewing and reporting of simple surgical specimens
3. Assessing patients and integrating clinical information in the evaluation of disease processes
4. Performing basic tasks in autopsy pathology

PGY 2 (Early Core)

Individuals in the PGY-2 year are closely supervised by senior level residents, Pathology Assistants in the gross room or faculty. Examples of tasks that are expected of PGY-2 physicians include: performance of autopsies, gross organ and tissue examination (including description and gross diagnostic interpretation), selection of tissue sections for microscopic interpretation from the gross
tissues/organs obtained by autopsy, surgery or biopsy, microscopic examination of tissue sections with identification of the process as benign/malignant/inflammatory, etc. and creation of differential diagnoses, microscopic examination of cytological specimens with identification of the process as benign/malignant/inflammatory, etc. and creation of differential diagnoses, interpretation of routine laboratory consultations provided by chemistry, etc., development of written reports of the Anatomic or Clinical Pathology findings, communication of preliminary and final diagnoses to pertinent members of the team and faculty. Regarding gross organ and tissue descriptions and reporting as a PGY-2, initially the PGY-2 resident only grosses tissues and organs under the direct supervision of senior residents, pathology assistants or faculty. After an initial introduction and confirmation of basic competency through direct observation of the resident’s progress by the senior Pathology Assistant in the Grossing Room, the straight-forward cases are then triaged to the resident. Close supervision of PGY-2 residents is provided by the Department pathology assistant staff. The attending staff provides supervision when the need arises. At the PGY-2 level, all resections with a suspected or confirmed diagnosis of cancer are to be reviewed with a senior resident or staff prior to grossing. As the resident progresses through their PGY-2 year, this “review” can progress from hands-on supervised grossing to a brief review of the specimen with a discussion of the case to oral review of the case. This may require advanced planning to ensure that there is a senior resident available to review the case. Please keep in mind that there is always a staff pathologist available to review cases if the need arises. With training and instruction, individuals may perform the following procedures without direct supervision by a Staff Practitioner or higher level Resident: Gross examination and dissection of biopsies, skin excisions and simple organ resections; preparation of frozen sections; prosection of autopsies; and preparation of cytology samples. With direct supervision, individual may perform gross examination and dissection of complex specimens and selection of appropriate tissues for frozen section.

The PGY2 year curriculum focuses on: autopsy pathology, surgical pathology and cytopathology. The resident and staff should have a discussion regarding the residents' learning goals and plan for each day. This should include a reasonable volume of work and the time needed to complete it and create a signout schedule for the following day that works for both parties. As all the slides for the following day are available the night before, the resident is encouraged to meet with their assigned staff before the end of the work day (e.g. 4:30pm or a mutually convenient time) to create this signout plan. Residents can also go to histology earlier to check if the following day slides have already been assigned to their staff. At this time, the pathologist will choose appropriate cases to give for resident review and will assign cases appropriate for the resident’s level of training in terms of difficulty and quantity of cases. PGY2 residents should be expected to preview 50-75% of the pathologist daily workload when they are on service. PGY2 residents are not expected to preview 100% of the workload. The resident may want to focus on case themes for the week (i.e. – cervical biopsies, endometrial resections etc.) however, this is something that should be discussed with the staff. A portion of
cases can be reviewed in the morning and the rest of the cases later in the day to allow residents sufficient time for case review. Again, residents should negotiate this signout plan with their staff in order to balance appropriate workload, optimize workflow and patient care. 

Keep in mind that along with competence in microscopic recognition of disease, a large part of the training program is preparing the resident for the processes involved in becoming a staff pathologist. This includes reviewing gross and clinical information in order to make an informed diagnosis. So even if you are uncertain of the diagnosis, it is important to review the gross and clinical information and prepare a microscopic description. The PGY2 resident must develop and implement a plan for study, reading and research of selected topics that promotes personal and professional growth and be able to demonstrate successful use of the literature in dealing with pathologic specimens and patients. The resident should be able to communicate with medical colleagues who submit patient tissues or blood fluids for pathologic study, patients and families about the disease process and the diagnosis and proper analysis of the tissues/body fluids submitted. Based upon the pathologic diagnosis, the pathology resident can assist in developing the plan of care as outlined by the attending. At all levels, the resident is expected to demonstrate an understanding of the socioeconomic, cultural, and managerial factors inherent in providing cost effective care. Call begins mid year (around December/January) depending on resident availability and call scheduling and residents will be provided adequate support by senior residents through shadowing opportunities.

PGY 2 residents will follow a standardized rotation scheduling focusing on autopsy and core surgical pathology areas as well as one block in research at the end of the academic year:

- Bone and Soft Tissue (1 block)
- Lymph Node (1 block)
- Head and Neck (1 block)
- Cardiovascular (1 block)
- Cytology (1 block)
- Gastrointestinal (1 block)
- Dermatopathology (1 block)
- Gynecology (1 block)
- Breast (1 block)
- Lung (1 block)
- Genitourinary (1 block)
- Research (1 block)
- Forensic (1 block)

A number of these rotations are introductory in nature, as they are major subspecialties, and are followed by two more blocks in PGY-3, during which knowledge is extended and fortified. These rotations include GI, Genitourinary, Breast, Gynecology, Dermatopathology and Lung. As described above, the staff pathologist is expected to provide an appropriate volume of cases for review based
on the PGY-2 resident’s level of training in these areas with the understanding that greater responsibility and workload will be taken on in PGY-3. Additionally, PGY2s are required to attend all interdisciplinary rounds in these subspecialties and are encouraged but not required to present. Furthermore, staff pathologists are required to be present at all interdisciplinary rounds during which a resident is presenting, regardless of PGY year. The PGY-2 resident is not expected to handle questioning from colleagues in other specialties during interdisciplinary rounds, as his/her knowledge base cannot be expected to be adequate at this point to take part in such discussions. Furthermore, PGY-2 residents rotating in these major subspecialties are not expected to give end-of-rotation presentations. These end-of-rotation presentations are to be done in the PGY-3 year.

**PGY 3 (Core)**

Individuals in the third post-graduate year are expected to perform more independently the duties learned in the first year and may supervise the routine activities of the first year residents in Anatomical Pathology. At the PGY-3 level, the residents’ diagnostic acumen focuses on making specific diagnoses in addition to creating lists of differential diagnoses. The resident is expected to take on more cases as compared to the PGY2 year and should still meet with the staff pathologist the day before to discuss their learning and signout plan the following day. The PGY-3 resident begins to gross more complex and larger cases with assistance from senior residents, the pathology assistant staff or faculty as needed. While it is not mandatory for PGY3 residents to have someone else physically review their specimens prior to grossing, it is recommended to at least discuss complex cancer cases with more senior residents or a staff pathologist prior to grossing. Keep in mind that senior residents and staff pathologists are always available for assistance. The PGY 3 resident should be able to demonstrate continued sophistication in the acquisition of knowledge and skills in both Anatomical Pathology and further their ability to function independently in evaluating Anatomical Pathology specimens while making diagnostic judgements and documenting those judgements in writing in the format of a consult.

Management of clinical laboratory problems becomes more of a priority for the PGY-3 resident than the PGY-2 resident, while written consult service responsibilities continue (consult cases). PGY-3 Residents may perform some procedures without direct supervision such as gross examination and dissection of complex resection specimens, selection of appropriate tissues for frozen section, preliminary interpretation of permanent sections and discussion with clinicians, and ordering of special stains, flow cytometry, electron microscopic studies. With direct supervision, residents may perform bone marrow biopsies and fine needle aspirates.

The PGY-3 curriculum focuses on building of the knowledge acquired in the PGY2 rotations. In the PGY-3 year while on a consult service or on the general surgical pathology rotation, the resident constructs the consult on their own and this consult is reviewed together with the attending faculty member. The revised consult is then printed and signed by the attending pathologist. The resident should take more of a leadership role in teaching the PGY-2 and medical students.
the practical aspects of Anatomical Pathology and be able to explain complex diagnoses to the health care team, patient and family. The resident should be adept at the interpersonal skills needed to handle difficult situations relating to patient care and/or laboratory management. The PGY 3 should be able to incorporate ethical concepts into patient care and discuss these with the medical staff managing the patient, the patient, family, and other members of the health care team.

PGY 3 residents will follow a standardized rotation scheduling, continuing to focus on core surgical pathology areas as well as one block in research:

- Breast (2 blocks)
- Gastrointestinal (2 blocks)
- Genitourinary (2 blocks)
- Gynecology (2 blocks)
- Lung (1 block)
- Research (1 block)
- Pediatric Pathology (1 block)
- Molecular pathology at TOH (1 block)
- Medical autopsy (1 block)

During the PGY-3 year, while completing the 2-block rotations in the major areas of subspecialty, the resident is expected to prepare for and present cases at all interdisciplinary rounds, and, with staff pathologist supervision and guidance, answer questions and take part in discussion during said rounds. Furthermore, the PGY-3 resident is expected to complete any end-of-rotation presentations required for the major subspecialty rotations during this year.

**PGY 4 (Core)**

In the third year, the resident should be capable of making common histopathologic diagnoses on gross, microscopic sections and cytologic smears and supervise the PGY-2 and PGY-3 residents in their daily activities. At or before the PGY-4 level in surgical pathology, the resident writes up the case as though they were going to sign it out independently of the attending staff. The resident’s final diagnoses are then reviewed by the attending and discrepancies are resolved by the resident and attending reviewing the slides concurrently. The PGY-4 resident is expected to act independently in grossing tissues but can always consult with the pathology assistants and staff as need arises. At or before the PGY-4 year while on consult services (consult cases) or on the general laboratory rotation, the resident is expected to work independently in developing the consult and sending the consult to the attending faculty member for review. The attending will discuss discrepancies with the resident and the consult is modified as appropriate. If there are no discrepancies, the consult is signed by the attending faculty member and released to the medical record. Individuals at PGY4 may perform, without direct supervision, all routine procedures except for providing final microscopic diagnoses and interpretations.
of frozen sections. It is expected that the PGY-4 resident be adept in the use of the literature and routinely demonstrate the ability to research selected topics and present these to the team. At the completion of the PGY4 year, the resident should be ready to assume senior level responsibility.

PGY 4 residents will follow a standardized rotation scheduling, with the focus shifting to more specialized areas in pathology, including Neuropathology, Cytopathology, Soft tissue and bone, Head and Neck, Molecular Pathology, Quality Assurance and Kidney. A senior level rotation in Forensic Pathology and one research block are also included:

Dermatopathology (Dynacare) (1 block)
Neuropathology (2 blocks)
Cytopathology (2 blocks)
Lung (1 block)
Forensics (1 block)
Bone and Soft Tissue (1 block)
Head and Neck (1 block)
Renal (1 block)
Lymph nodes (1 block)
Study Block (1 block)
Pediatrics (1 block)

**EPAs: CORE for PGY-2 TO PGY-4**

1. Initiating ancillary studies at the time of specimen receipt
2. Performing gross dissection of routine surgical specimens
3. Performing gross dissection of complex surgical specimens
4. Generating diagnostically accurate and complete pathology reports for routine surgical pathology cases
5. Generating diagnostically accurate and complete pathology reports for complex surgical pathology cases
6. Performing medical autopsies and generating complete and diagnostically accurate reports
7. Performing routine forensic autopsies and generating complete and diagnostically accurate reports
8. Performing routine pediatric, fetal/perinatal autopsies
9. Selecting, interpreting, and integrating molecular test results
10. Selecting, interpreting and integrating ancillary diagnostic techniques other than molecular pathology
11. Managing cytopathology specimens within the preparation laboratory
12. Assessing and reporting cytopathology specimens
13. Conducting intraoperative assessments
14. Teaching health care professionals and colleagues
15. Participating in quality management activities
16. Conducting scholarly work
17. Maintaining personal learning and career plans
18. Participating in direct patient care activities that highlight clinicopathological correlation

PGY 5 (TTP)

Individuals in the fifth post graduate year assume an increased level of responsibility as the senior resident on service and are expected to be able to diagnose the more rare, complex and unusual cases that are required for competency as a diagnostic Anatomic Pathologist. The PGY-5 year is one of senior leadership and the resident should be able to assume responsibility for organizing the service and supervising junior residents and students. The resident should have mastery of the information contained in standard texts and be prompt in using the literature to solve specific problems. The resident will be responsible for presentations at conferences and for teaching junior residents and students on a routine basis. The PGY 5 should begin to have an understanding of the role of the practitioner in an integrated health care delivery system and to be aware of the issues in health care management facing patients and physicians.

By the PGY-5 year, the resident will have completed all core rotations required by the Royal College of Physicians and Surgeons of Canada. The resident will be expected to complete 1 mandatory block in Molecular Pathology, 1 in Cytopathology and 11 more blocks in areas of Pathology that he or she chooses in order to solidify their knowledge base in preparation for writing of the Royal College examination in Anatomic Pathology:

Elective (7 blocks)
Cytology (1 block)
Molecular genetics and cytogenetics at CHEO (1 block)
Quality assurance (1 block)
Consult (1 block)
Medical autopsy (1 block)
Research (1 block)

EPAs: TRANSITION TO PRACTICE – PGY-5

1. Managing the daily workload of an anatomical pathologist including surgical pathology, intraoperative consultations, cytopathology and autopsy
2. Supervising, teaching and assessing junior learners
3. Participating in laboratory management activities, in the role of junior staff
4. Developing and implementing a personal learning plan geared to setting of future practice
5. Liaising with clinical services regarding the diagnostic, prognostic and predictive implications of molecular pathology test results
6. Representing Anatomical Pathology in multidisciplinary teams
PGY 2 though PGY 5

Satisfactory performance on rotations allows the resident to progress to higher levels of graduated responsibility as outlined above. Evaluations of the resident’s performance are regularly reviewed by the program director, residency program committee and clinical competence committee (CCC). The CCC will meet at least 4 times a year and will be responsible for deciding whether residents will progress to the next stage of training. If promotion is deserved, the resident is offered a written contract for the following year. Twice yearly the resident meets with the program director to review the resident’s evaluations and progress. At this time the resident also receives a letter from the program director summarizing the resident’s evaluations for the previous six months.

ALL YEARS (PGY1-PGY5)

Residents at every level are expected to treat all other members of the health care team with respect and with recognition of the value of the contribution of others involved in the care of patients and their families. The highest level of professionalism is expected at all times. Residents are expected to treat others with respect and consideration. Ego and personality conflicts are not conducive to good patient care. Long hours and the stress of practice can precipitate conflict. The resident should be aware of the situations where this is likely to happen and try to compensate by not escalating the situation. The resident is expected to develop a personal program of reading and self-instruction. Residents are encouraged to engage in directed reading daily with regard to problems that they encounter in Anatomical Pathology. Residents are expected to attend all conferences at the services and program level. The conference program is designed to provide a didactic forum to augment the resident’s reading and clinical experience. Residents shall follow hospital policies and procedures and support the mission, vision and values of the facility. Residents shall maintain a professional appearance, professional respect for all tissues and organs submitted and safety of the patient when dealing with patients directly.

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