**Pediatric and Perinatal Pathology Rotation Goals and Objectives**

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The goal of the **Pediatric Pathology Rotation** is for the resident to move from being a

**Novice**  (A novice knows little about the subject, and rigidly adheres to rules with little situational perception. He/she does not feel responsible for outcomes.)

To

**Advance Beginner/Competent** (The competent learner grasps the relevant facts, can sort information by relevance, can bring his/her own judgment to each case, and solve problems. Guidelines are adapted to unexpected events. He/she feels accountable for outcomes because of increasing decision-making.)

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| **Rotation Goals** | **Rotation Objectives** |
| **Medical Knowledge**  Acquires knowledge of pathophysiology and laboratory manifestations of common and uncommon conditions; knows where to access information to fill gaps in knowledge.  Acquires knowledge of less commonly-encountered conditions and laboratory techniques; critically evaluates knowledge sources and uses evidence-based approach. | * Residents will: * Develop reasonable and complete differential diagnoses for pediatric surgical pathology cases based on the available clinical information, gross and microscopic features, and current published information. * Suggest appropriate additional testing (special stains, electron microscopy, and further clinical testing such as serology, etc.), included in their workup of cases, if applicable. * Include all pertinent pathologic findings in the final pathology report. * Demonstrate knowledge of basic and clinical science and understanding of mechanisms of diseases in pediatric patients and be able to apply such knowledge to their cases. * Demonstrate familiarity with special procedures such as immunohistochemical stains, molecular and cytogenetic testing used in pediatric pathology, their interpretation, methods and applications. |
| **Patient Care**  Is able to perform procedures necessary to generate laboratory information, gather clinical information needed to establish a diagnosis or differential diagnosis, and suggest appropriate ancillary studies. Responds to requests for consultation. | * With appropriate supervision (see below), the resident will: * Participate in grossing some of the resection pediatric specimens, placentas and fetal examinations of fetuses under 27 weeks gestation at Mott under the supervision of the attending pathologist or designee. * Participate in triaging fresh tumors and lymph nodes for special studies and to freeze tissue for the Children’s Oncology Group protocols (COG). * Participate in performing and sign out of frozen sections. * Review pediatric biopsies, surgical cases, placentas and fetal cases. * Present representative cases in the weekly departmental pediatric pathology review conference. * Attend pediatric interdepartmental meetings such as tumor boards, GI conference, M/M and Surgical-radiology-pathology conference. * Consult textbooks, journals and on line resources as appropriate during case sign-out. Textbooks are available in the Mott reading room. |
| **Practice-Based Learning and Improvement**  Uses feedback and evaluations to generate or modify learning plan and improve skills,  Adapts practices based on literature review, case outcomes, peer reviews, and system demands; seeks and gives feedback to improve self and others. | The resident will:   * Review the slides and reports and read appropriately for self improvement. * Use information technology to support their own education, e.g. Medline computer-based searches, pathology based web sites, Clinical information (MiChart) and Pathology information (Soft) systems. |
| **Interpersonal and Communication Skills**  Establishes collegial interactive and communication skills in dealing with others; structures reports that are clear, informative, and succinct; listens to and fulfills requests from other providers.  Effectively communicates in a variety of settings, including during conferences, while providing consultations, and teaching peers. | The resident will: Follow instructions from attending pathologists during performance of intraoperative consultations, surgical specimen dissection, and gross description and during sign out of cases.Demonstrate interest in pathology case material during case sign-out by asking relevant questions, and respond articulately to questions from attending pathologists.Elicit relevant clinical information from, and provide preliminary diagnostic information to, clinicians via telephone or direct conversations.Generate concise, accurate and complete dictated gross descriptions, and written microscopic description/diagnoses,of surgical cases in preparation for sign-out with attending pathologists.Prepare and present pediatric surgical cases in weekly slide review conference. |
| **Professionalism**  Is honest, compassionate, and respectful of others; complies with laws and regulations pertaining to medical practice; fulfills patient care and educational responsibilities faithfully.  Understands professional responsibility to appear for duty rested and fit to provide service. Recognizes and responds to need for help from colleagues. | The resident will:   * Practice considerate, ethical and respectful behavior with faculty, peers, technical and clerical staff. * Practice responsiveness and accountability to the needs of patients and their families, and clinicians, which supersedes self-interest. Contribute to the timely completion of surgical pathology reports, and discuss results with clinicians. * Demonstrate commitment to excellence and ongoing professional development displayed by completing directed and independent reading from pathology textbooks, and journal articles during the rotation. * Maintain ethical principles pertaining to confidentiality of patient information acquired during handling of cases. * Maintain ethical principles pertaining to business practices by assigning correct CPT Codes to ensure accurate billing. |
| **Systems-based Practice**  Identifies issues related to error, cost, and the need for interdisciplinarycollaboration in the delivery of health care. | The resident will:   * Understand how their handling of surgical specimens affects other health care professionals, the health care organization and the larger society. * Make accurate and timely diagnoses with cost efficient use of routine and special stains, and other testing. * Achieve rapid turnaround time for pathology reports, and timely communication of results to clinicians in order to expedite patient treatment and discharge from the hospital. * Identify situations that require expedited processing (e.g. STAT processing of Hirschsprung’s, all transplant and tumor biopsies). * Consistent approach to reducing errors and improving patient care. * Document frozen section discrepancies, intra and extra departmental consultations. * Participate in Weekly Surgical Pathology Review conference and understand its use for Quality Improvement. |

**Plan for Training**

**ROTATION DESCRIPTION**: 4 weeks rotation in pediatric and perinatal pathology divided into:

Pediatric surgical pathology and fetal examination: 3 weeks

Placental pathology: 1 week

**RESPONSIBILITES, EXPECTATIONS, GUIDELINES:**

1. Familiarize his/herself with the Department Schedule, his/her duties, the Pediatric Pathology Resident Rotation Manual and objectives of the rotation within the first few days. The goals and objectives are given to the resident at the beginning of the rotation, explained and reviewed with the resident by faculty.
2. Available in the Department during working hours (8-6), unless prior arrangements are made and he/she may be reached by beeper.
3. Review daily OR schedule to prepare for frozen sections and appropriate triaging of special specimens.
4. Most of surgical cases and placenta slides are usually available between 9-10 am. Residents are expected to review slides, relevant clinical history, correct the gross description if needed, prepare reports and be ready to review cases with faculty. Sign out is usually 2-4 pm unless prior arrangements are made based on availability of resident or faculty.
5. Based on the level of experience of the resident and volume of service, faculty may select the cases with the highest educational value and those the resident grossed to be signed out with the resident and faculty will finish other routine cases that are of lesser value. Slides of interesting cases will be reviewed in the weekly Monday conference.
6. Most of the time, the volume allows for signing all cases with the resident by 4 pm. If the volume is heavy or cases received late and cases can’t be finished by 4 pm, the resident will be released from sign out to gross his/her cases. Remaining cases may be finished by faculty. These cases will be discussed at a later time with residents and they will be provided with feedback about their diagnosis. Slides of interesting cases will be reviewed in the weekly Monday conference.
7. Late cases (slides received after 12 pm) may be signed out with residents next day or finished by faculty in rush cases. Slides of interesting cases will be reviewed with the resident at a later time and often discussed in the weekly Monday conference.
8. Residents are expected to consult the attending pathologist before ordering special stains. They are expected to review and/or interpret special stains when appropriate.
9. The resident is expected at the time of sign out to be ready to discuss their differential diagnosis and be familiar with the clinical entity. Based on the level of experience of the resident, some or many of the cases may require preparation by reading the clinical information and/or some textbooks or literature before sign-out. Important pediatric pathology textbooks are available in the reading room.
10. Residents are expected to participate in the gross examination of some resection surgical specimens and fetal examination (3 weeks) and placentas (1 week). All specimens received at Mott and accessioned by 5:00 pm should be grossed and blocks loaded on the processor except larger specimens which require overnight fixation. Last blocks pick up from Mott is 8:00 pm.
11. Consult the Attending Pathologist for orientation and instruction when faced with unfamiliar specimens and if there is a need to delay grossing for longer fixation.
12. Most of the time residents do their routine grossing 4-6 pm. Fresh specimens, which require special handling will be prepared as received and grossed after appropriate fixation. Specimens left from prior day should be grossed the following morning.
13. The pediatric team including the resident is responsible to cover pediatric frozen sections and fresh specimens from Mott OR until 6 pm. After 6 pm, the on call team covers Mott OR. The resident may leave before 6 pm whenever they complete their duties including grossing all their cases and there are no pending cases in the OR schedule. The attending pathologist needs to be informed.
14. The resident is expected to attend some of the multidisciplinary Departmental Conferences during the rotation when there schedule allows for that (See Attached Schedule). A monthly schedule for the pediatric service with the resident assignment and a monthly schedule for conferences will be provided at the start of the rotation.

**Supervision**

The following activities are to be conducted with **Direct Supervision** (the supervising physician is physically present with the resident):

* The first 3 pediatric pathology large resection specimens gross dissections (mandated by ACGME; direct supervision may be provided faculty or by 3rd or 4th year resident or fellow)
* Electronic verification of diagnoses, additional or amended diagnoses, and comments

The following activities may be conducted with **Indirect Supervision** (direct supervision immediately available either within the hospital o by telephonic or electronic communication):

* Gross dissections other than those described above
* Communications with other providers when needed

The following activities may be conducted with **Oversight** (the supervising physician is available to review with feedback after activity is completed):

* Dictation of preliminary diagnoses

EVALUATION METHODS

* + Med Hub Evaluations (for resident, faculty and rotation)
  + Pediatric pathology rotation evaluation (form provided at the start of rotation)
  + Pediatric pathology staff evaluation (form provided at the start of rotation)

*Criteria to Pass Rotation:*

1. Competent performance overall as stated in the objectives above.

2. Appropriate attendance and availability as described above.

*Remediation:*

Residents will be given frequent feedback about their performance such as daily diagnosis concordance rate, quality of gross description, conference presentation etc... Residents will be counseled during the rotation but if the faculty feel that performance is less than expected, additional rotation time or other plans for improvement may be suggested following consultation with the residency program director.

CONFERENCE SCHEDULES – See Conference List

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| **Name of Conference** | **Time** | **Location** |
| Pediatric Case Review/QA Conference | Weekly @ 1:00 Monday | Faculty suite |
| Pediatric Hematology-Oncology Tumor Board | Weekly @ 12:00 Wednesday | Mott Hospital Room 4410 |
| Pediatric Gastrointestinal Conference | 1st and 3rd Monday @ 11:30 | Faculty suite |
| Pediatric Surgery-Radiology-Pathology Conference | 2nd Thursday @ 7:30 | Mott, Pediatric Surgery conference room,4950 |
| Pediatric Cardiology | Monthly at 4:00 pm 3rd Thursday | Mott 11th floor Room 11-731 |
| PICU Pathology Grand Round | Monthly @7: 30 4th Wednesday | Mott 10-352 East |
| Neonatal Autopsy Review | Quarterly @ 2:30 1st Friday | Mott NICU conference Room 8-352 |
| Problem pregnancy | Weekly @ 12:30 Thursday | Mott Hospital Room 4410 |