University of Minnesota Lab Medicine and Pathology

Cytopathology Rotation

**Location:** C448 Mayo

**Duration:** Three months between PGY 2-4 years; additional training available as elective

**Rotation Director:** Jimmie Stewart, M.D. phone 612-273-5758 (pager 899-5203)

**Other Faculty:** Khalid Amin MD 612-273-5684 (899-1244) Tetyana Mettler MD 612-273-4934(899-5616) Liz Miller CT (ASCP) 612-273-4058

**General Description:**
As a part of the anatomic pathology requirements, residents are required to complete three months of cytopathology. The formal rotations occur at the University of Minnesota Medical Center, but more exposure to cytopathology may be gained during the optional HCMC rotation. The intent of the cytopathology rotations are to facilitate the resident 1. Acquiring the skills of making smears/touch preps, 2. Acquiring the skill set to evaluate cervical/gynecological preparations for dysplasia/malignancy, 3. Acquiring the knowledge/morphologic skills to evaluate body fluids, deep fine needle aspirations (FNA’s) and superficial FNA’s, 4. Learning the utilization of telecytopathology in the rapid interpretation of adequacy of touch preps of small biopsy and FNA specimens, and 5. Performing FNA’s of clinical masses with confidence. This can only be accomplished with reading the selected texts with effort in reading for assigned cases, and preparation for sign-out. The residents and fellows are expected to maintain a professional demeanor at all times as they are an extension of the cytopathology service to the clinicians of the hospital.

**Goals and Objectives:**

Upon completion of this rotation, the resident will be able to:

- Discern dysplastic lesions and common infectious etiology on cervical/gynecologic preparation(Pap test)
- Morphologically identify cytopathologic characteristics of malignancy and commonly cytopathologic features occurring in body fluids, touch preps, and FNA’s
- Learn morphologic ancillary tests needed to complete a diagnostic panel using a cytopathologic specimen as well as the limitations of such a specimen.
- Learn to perform all duties leading to the performance of FNA’s and perform FNA’s with confidence to obtain material that can be utilized to make a cytopathologic diagnosis.
- Understand regulatory requirements for cytopathology, such as Peer Review, Five year retrospective review, cyto/histo correlation, etc.

The learning objectives below reference the corresponding ACGME core competencies: Patient Care (PC), Medical Knowledge (MK), Professionalism (Prof), Communication Skills (CS), Practice Based Learning and Improvement (PBLI), and Systems-Based Practice (SBP).

- Timely daily attendance for the entire service day beginning at 8am is expected; we expect that rare late arrivals and/or absences will occur, but it is essential to communicate with the fellows and staff if you will be late/absent. The service ends at 5pm, but may go over to 6:30pm as clinically needed. (Prof, CS)
- Attendance at surg path/cyto Journal Club, and AP Quality Assurance is mandatory while attendance at the daily AP consensus conference is preferred as possible given the days immediate adequacy load. (Prof, MK, CS)
- Demonstration of professional behavior in clinical situations with patients, technical staff, and clinical faculty. (Prof, CS, PC)
- Be able to consent a patient for FNA by giving the risks and benefits along with a plain explanation of the process of obtaining a diagnosis as well as the likelihood of getting a diagnosis. (PC, CS)
- Proficiency in the interpretation of microscopic findings of immediate evaluations and communication of these findings to clinicians and faculty pathologists. (Prof, CS, PC, PBLI)
• Understanding of basic criteria for the diagnosis of squamous intraepithelial lesions, basic glandular lesions and infectious processes on a Pap test (MK)
• Understanding the cytomorphology of common malignancies in major organs as seen on FNA (MK)
• Understand with the ability to use the appropriate cytologic nomenclature when determined by national consensus (Bethesda for Pap test, Paris for urine, etc.) (SBP, MK, CS)
• Develop the ability to perform a basic FNA to proficiently obtain material for cytologic diagnosis. (PC)
• Develop and understanding of the most appropriate ancillary tests to aid in the diagnosis of cytologic material of either exfoliative cytologic material or FNA (organism stains, IHC, FISH, other molecular tests, etc). (MK, PC)

**Assigned Reading:**

- Review of Cytoprep powerpoint with Liz Miller in **First Month**
- Review of Navigating Regulations in cytopathology with Liz Miller in **Third Month**
- Cytology: Diagnostic Principles and Clinical Correlates, 4e 4th Edition by Edmund S. Cibas MD, Barbara S. Ducatman MD  *Text is available in Cytopathology. This book should be read for cytopathology, but can be read before cytopath.*  
  - Chapters 1 through 7 with emphasis on Chap 1 and 2 in first month, and Chap 3-7 in second month
  - Chapters 8 through 18 with emphasis on these in the third month  
    - The Bethesda System for Reporting Cervical Cytology: Definitions, Criteria, and Explanatory Notes 3rd ed. 2015 Edition by Ritu Nayar (Editor), David C. Wilbur (Editor)  
      - *First Month*  
    - The Bethesda System for Reporting Thyroid Cytopathology: Definitions, Criteria and Explanatory Notes 2010th Edition by Syed Z. Ali (Editor), Edmund S. Cibas (Editor)  
      - *Second and Third Month*  
    - The Paris System for Reporting Urinary Cytology 1st ed. 2016 Edition by Dorothy L. Rosenthal (Editor), Eva M. Wojcik (Editor), Daniel F.I. Kurtycz (Editor)  
      - *Second and Third Month*

**Optional Reading:**

- The Art & Science of Cytopathology (4 Volume Set) 2nd Edition by Richard Mac Demay (Author) 2011  *This book is the current bible of cytopathology. If there is time to review, this should be read. It is however, 4 volumes.*

**Call Duties:** While there is no after-hours call, residents should be able to work with cytopathology fellows to accommodate uncommon requests for immediate evaluation between 5pm and 6:30PM if notified by 4pm by the requesting clinical service.

**During the rotation, the trainee is expected to join the following conferences:**

- Anatomic Journal club - Thurs 12:00-1:00PM (weekly) – Mayo C456
- Anatomic pathology Quality Assurance meeting Quarterly in Mayo C456
- Resident Didactic Series: Wed 7:00-8:00AM & 9:15-10:15AM (weekly) – Mayo D175
- Anatomic Pathology Consensus Conference: 2:00-3:00 PM (daily) – Mayo C456

**Other Requirements:**

- Case logs of performed FNAs in ACGME Case Log system

**Assessment methods:**

Resident performance on this rotation will be assessed by:

- End of rotation practical slide review and a multiple choice examination. Results of which will be shared with the resident at the time of feedback by Rotation Director.
- Formative feedback provided by Rotation Director and other faculty
- Performance evaluation completed by attending physician(s) at the end of the rotation