

Cytopathology Curriculum

Cytopathology
The Six General Competencies
Fellowship Training and Residency rotation

1. Patient Care (PC): Trainees must demonstrate a satisfactory level of diagnostic competence and the ability to provide appropriate and effective consultation in the context of pathology services. The Cytopathology fellow and residents are expected to:

- Communicate effectively and demonstrate caring and respectful behaviors when interacting with health care providers, patients, and patients' families.
- Gather essential and accurate information from health care providers and patients.
- Make informed consultative opinions about performance of diagnostic test based on up-to-date scientific evidence and clinical judgment.
- Develop a diagnosis or differential diagnosis.
- Educate health care providers, patients, and their families.
- Use information technology to support patient care decisions and education of health care providers and patients.
- Perform competently all invasive procedures considered essential for the practice of Pathology.
- Work with health care professionals, including those from other disciplines, to provide patient-focused care.

2. Medical Knowledge (MK): Trainees must demonstrate knowledge about established and evolving biomedical, clinical and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to pathology. The fellow and residents should be able to:

- Demonstrate an investigative and analytic thinking approach to clinical and pathological problems.
- Know and apply the basic and clinically supportive sciences appropriate to pathology.

3. Practice-Based Learning and Improvement (PBLI): Trainees must be able to demonstrate the ability to investigate and evaluate their diagnostic and consultative practices, appraise and assimilate scientific evidence and improve their patient care practices. Fellow and residents are expected to:

- Analyze practice experience and perform practice-based improvement activities using a systematic methodology.
- Locate, appraise, and assimilate evidence from scientific studies related to pathology problems.
- Apply knowledge of study designs and statistical methods to the appraisal of clinical and pathologic studies.
- Use information technology to manage information, access on-line medical information, and support their own education.
- Facilitate the learning of students and other health care professionals.

4. Interpersonal and Communication Skills (IPCS): Trainees must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with other health care providers, patients, and patients' families. Fellow and residents are expected to:

- Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.
- Work effectively with others as a member of a health care team.

5. Professionalism (P): Trainees must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Fellow and residents are expected to:

- Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development.
- Consistently perform duties in a dependable, responsible manner.
- Demonstrate a commitment to ethical principles pertaining to provision of clinical care, confidentiality of patient information, informed consent, and business practices.
- Demonstrate sensitivity and responsiveness to patients' culture, age, gender and disabilities.

6. Systems-Based Practice (SBP): Trainees must demonstrate an awareness and responsiveness to the larger context and system of health care and the ability to call on system resources to provide pathology services that are of optimal value. Fellow and residents are expected to:

- Understand how their professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice.
- Know how types of medical practices and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.
- Practice cost-effective health care and resource allocation that does not compromise quality of care.
- Advocate for quality patient care and assist patients in dealing with system complexities.
- Know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance.

Goals and Objectives Cytopathology Rotation

Rotation Goals: The following refers to Specific Competency (*See Appendix for General Competency Objectives*). There is to be a progressive increase in each resident's responsibility commensurate with his/her level of training. This increase in responsibility will include clinical, teaching and administrative responsibilities.

Medical Knowledge & Patient Care Competencies: Understanding of proper collection, processing, and interpretation of gynecologic and non-gynecologic cytology specimens (including FNA).

Interpersonal and Communication Skills & Systems-based Practice Competencies: Knowledge of basic principles to enable transmission of the cytological diagnosis in an informative, timely, and succinct way that best serves patient and clinician needs utilizing communication skills and laboratory information systems.

Practice-based learning and improvement competency: Understanding of principles of data management for quality assurance, billing, and clinical research.

Professionalism competency: Understanding of the need for commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient and clinician population as well as to research.

Rotation Objectives:

Objectives classified per competency type concentrating on Medical Knowledge and Patient Care (diagnostic and technical component) with option of using general objectives for competencies 3-6.

Gynecologic Samples:

The resident should be able to:

- View any Gyn Pap test and properly classify by The Bethesda System 2001 utilizing both conventional smear and liquid-based preparations. If given a 10 slide quiz 90% of the slides should be able to be properly classified (within one gradation of classification). (*Competencies PC, MK, PBLI, IPCS, SBP*)
- List the common inflammatory etiologies as well as identify them as they apply to gynecological samples. (*PC, MK*)
- Suggest a variety of methods for confirmation of HPV (human papilloma virus) and other infective agents utilizing histochemical, immunochemical and molecular diagnostic techniques in a cost-effective manner for both gynecological and non-gynecological samples. (*PC, MK, PBLI, IPCS, P, SBP*)
- Recite the criteria for unsatisfactory Pap tests and the quality indicators for the Bethesda 2001 terminology. (*PC, MK, PBLI*)
- Explain proper performance of a Pap test for a clinician utilizing both conventional smear and liquid-based collection methods. (*PC, MK, PBLI, IPCS, P*)
- Detail potential slide labeling discrepancies and list differences between conventional smear, ThinPrep® and CytoRich® Pap test preparations. (*PC, MK, PBLI, SBP*)
- Give causes for common slide artifacts for both conventional smears and liquid-based systems. (*PC, MK, PBLI, SBP*)
- Give reasonable suggestions for clinical follow-up based on Pap test diagnoses. (*PC, MK, PBLI, IPCS, P, SBP*)

Non-Gynecologic Samples:

The resident should be able to:

- View any body site cytology and properly classify as negative, inflammatory, atypical/suspicious, neoplastic, or malignant for both aspiration and exfoliative specimens. (If given a 10 slide quiz 80% of the slides should be able to be properly classified.) *(PC, MK, PBLI, IPCS, SBP)*
- List the common inflammatory etiologies as well as identify them in reference to body site of the nongynecological sampling. *(PC, MK, PBLI)*
- Recite the criteria for limited and unsatisfactory smears dependent on body site and be able to communicate them to a clinician in a concise and “non-combative” manner. *(PC, MK, PBLI, IPCS, P, SBP)*
- Explain proper performance of FNA for a clinician. *(PC, MK, PBLI, IPCS, P)*
- Recite potential FNA procedural complications to a patient. *(PC, MK, IPCS, P)*
- Will have consented and successfully performed diagnostic FNAs on patients. *(PC, PBLI)*
- Give reasonable suggestions for clinical follow-up based upon FNA or other nongynecological cytology result. *(PC, MK, PBLI, IPCS, SBP)*
- List and explain choices for continuous quality assurance monitors for both gynecologic and nongynecologic cytology specimens. *(PC, MK, PBLI, IPCS, P, SBP)*
- Identify a contaminant and know how to confirm it and deal with the problem for quality assurance and diagnostic purposes
- Identify and demonstrate steps in managing potential complications of FNA such as pneumothorax, arterial bleed, fainting, and needle-stick injury.
- Prioritize work, dealing with urgent cases first.
- Explain the importance of routinely checking all prior and subsequent histology on cytology cases for quality assurance.
- Explain and demonstrate proper triage of specimens for ancillary testing based upon a rapid interpretation of cytological specimens (especially radiologically-guided FNAs but not limited to) and final preparations. *(PC, MK, PBLI, SBP)*
- List the components of the FNA procedure and interpretations that are professionally billable by the pathologist. *(IPCS, P, SBP)*

Skills levels: Novice, advanced beginner, competent, proficient, or expert levels.

Cytopathology I (Two months rotation)

Skill Level I (Learning of those skills necessary to move from novice to advanced beginner; from basic acquaintance with cytopathology to readiness to commence independent learning of cytopathology.)

- Be able to verify that cytopathology requisitions are completed correctly
- Demonstrate familiarity with methods of collection, cytopreparatory processing, automated screening, and turn around times for common exfoliative cytopathology specimens, in order to be able to answer clinicians' questions concerning expected results from the cytopathology laboratory.
- Demonstrate knowledge of the 2001 Bethesda System terminology for reporting gynecologic cytopathology specimens
- Be familiar with the 2006 American Society for Colposcopy and Cervical Pathology guidelines for management of abnormal cytology.
- Demonstrate knowledge of the elements of adequacy and the current laboratory reporting system for fine needle aspiration and nongynecologic cytopathology specimens from the various commonly sampled body sites.
- Demonstrate knowledge of the cytopathologic features of normal, reactive, infectious, dysplastic and neoplastic conditions as seen in common cytopathology specimens.
- Demonstrate knowledge of how nongynecologic cytopathology specimens are screened.
- Demonstrate knowledge of how to evaluate common cytopathology specimens comprehensively.
- Demonstrate knowledge of how to perform quality assurance correlation of cytopathology specimens with surgical pathology specimens.

Recommended Readings:

1. *Cytology. Diagnostic principles and clinical correlates.* Cibas, ES., Ducatman, BS. Saunders. Second Edition.
2. *Practical principles of cytopathology.* DeMay RM. ASCP press. 1999.

Cytopathology II (Third month advanced rotation)

Skill Level II (Learning of those skills necessary to move from advanced beginner to competent practitioner; from independent learning of cytopathology to readiness to commence safe practice of cytopathology.)

- Demonstrate knowledge of the interpretation of cytopathology specimens from the various commonly sampled body sites, by examining cases prior to signout and being prepared to give appropriate diagnostic opinions, differential diagnoses, and/or follow-up recommendations.
- Demonstrate knowledge of the application of ancillary techniques including immunocytochemistry, flow cytometry, electron microscopy, molecular studies, cytogenetics and image analysis.
- Demonstrate knowledge of how to rapidly evaluate common FNA specimens, including determination of specimen adequacy, the need for ancillary techniques, and the appropriate collection materials for such techniques.

- Demonstrate working familiarity with the instruments and material needed to perform the FNA procedure.
- Demonstrate competency under supervision of staff cytopathologists in the performance of superficial FNA, taking history, obtaining informed consent, examining the lesion to be aspirated, preparing the patient and instruments, physically procuring the specimen, preparing and staining the smears, rendering a preliminary interpretation, proper handling for ancillary techniques, and appropriate after-care of the patient.
- Demonstrate ability to assist at the performance of deep FNA biopsies in settings such as radiology and endoscopy, with appropriate determination of specimen adequacy and necessary ancillary techniques, and collection of supplementary diagnostic materials for such techniques.
- Demonstrate knowledge of training others (clinicians, radiologists) on correct performance of the FNA procedure.
- Demonstrate knowledge of how to clearly, concisely and completely compose a cytopathology report for specimens from various commonly sampled body sites based on the final diagnostic findings and how to appropriately recommend clinical follow-up.
- Demonstrate familiarity with the principles of automated screening for gynecologic cytopathology specimens.
- Demonstrate knowledge of how to perform quality assurance, including correlation of gynecologic and nongynecologic cytopathology with surgical pathology, both in aggregate for quality assurance purposes and on a case-by-case basis for diagnostic purposes.
- Demonstrate knowledge of how to apply concepts of quality control, quality improvement, risk management, and regulatory compliance, including correct coding as they pertain to the practice of cytopathology.

Recommended Readings:

1. *The Art and Science of Cytopathology*. Demay RM. ASCP Press, Chicago, 1995.
2. *Practical principles of cytopathology*. DeMay RM. ASCP press, Chicago, 1999.
3. *Cytology. Diagnostic principles and clinical correlates*. Cibas, ES., Ducatman, BS. Saunders. Second Edition.

Outcomes Assessment

Trainee evaluations covering all six competencies utilizing both objective and subjective methods derived from the ACGME toolbox and Pathology Quadrad suggestions.

Subjective Evaluations:

The standard resident evaluation form (E*Value) will be completed at the end of each trainee time-period by the program director with input from the faculty members and the cytology staff. If the resident's performance is perceived as unsatisfactory at anytime during the rotation it should be discussed in a timely fashion prior to the end of the rotation. Sharing face to face with the trainee any written evaluation by the evaluator is strongly encouraged.

The Cytopathology fellow is evaluated (E*Value) biannually by the program director with input from the faculty members, residents and cytology staff. If the fellow's performance is perceived as unsatisfactory at anytime it should be discussed in a timely fashion. Sharing face to face with the fellow any written evaluation by the evaluator is strongly encouraged. At the end of the year the fellow receives a global evaluation (360) from a clinician, cytology staff and laboratory administrator. A final evaluation is written by the program director to the GME.

Objective Evaluations:

Medical Knowledge & Patient Care Competencies:

The residents are tested yearly by the RISE examination.

The cytopathology fellow is enrolled to take an on line examination three times a year to evaluate fellows during training and before issuing a completion certificate. The Progressive Evaluation of Competency (PEC) for Cytopathology Fellows Program offers online exams over a year that will track a fellow's baseline, mid-year and final level of knowledge, and overall competency in cytopathology. Topics covered include: Gynecological, Non-gynecological, FNA, Ancillary and Laboratory Operations.

The question may include questions that cover Practice-based learning (ie: quality assurance monitors & cost effective ordering of stains), Communication skills (ie: structure of the Bethesda report), Professionalism (ie: CLIA regulations & ethics questions), and Systems-based practice (ie: suggested clinical follow-up for a Bethesda diagnosis, evidence-based & cost conscious strategies for screening, diagnosis & management) besides the routine Medical Knowledge and Patient Care Competencies.

Appendix

General Objectives covering Competencies 3-6

Practice-Based Learning & Improvement:

Trainees will demonstrate:

- Ability to formulate quality assurance monitors for specific laboratory areas
- Ability to apply knowledge and appropriate statistical methods to the appraisal of clinical studies and current literature in medicine
- Awareness of the variety of pathology practice settings
- Ability to utilize library, web-based, and other educational sources
- Ability to use information technology and other methods to support monitoring of patient laboratory testing and enhancing clinician education in regards to appropriate and cost-effective utilization for patient management.

Interpersonal and Communication Skills:

Trainees will demonstrate:

- Effective and professional consultation to other clinicians and other health care professionals and sustain ethically sound professional relationships with colleagues, patients, and patients' families.
- Interact with consultants, laboratory personnel, and administration in an appropriate manner.
- Ability to provide services in a timely, organized and coherent manner
- Effective listening skills and ability to carryout standard operating procedures and verbal instructions

Professionalism:

Trainees will demonstrate:

- Sensitivity and responsiveness to patient, colleagues and laboratory personnel culture, age, gender, and disabilities.
- Commitment to ethical principles pertaining to confidentiality of patient information, informed consent, and business practices.
- Respect, compassion and integrity
- Adherence to guidelines and regulations set forth by regulatory and accrediting agencies.
- Ability to recognize and identify deficiencies in peer performance

Systems-Based Practice:

Trainees will demonstrate:

- Knowledge of the laboratory management's effect of other health care professionals, organizations, and society
- Ability to access, understand and utilize the resources, providers, and systems necessary to provide optimal care
- Knowledge of how the types of medical practices and delivery systems differ from one another, including methods of controlling health care costs and allocating resources
- Ability to apply evidence-based, cost conscious strategies for screening, diagnosis, and disease management.
- Ability to provide cost-effective health care and resource allocation without compromising quality of care.

Residents and Fellows
Duties & Responsibilities in Cytopathology

The overall goal of the Cytopathology rotation is to help residents and fellows build a strong base in the discipline of cytopathology and get them acquainted with most technical and diagnostic aspects of cytopathology. During their two-month rotation, the residents function with close supervision and instruction by the faculty and the Cytopathology Fellow. The trainees are exposed to a balanced variety of cytologic material. Fundamental issues relating to attention to details, evaluation of the technical quality of the cytologic preparations, cytohistologic correlation, elimination of discrepancies, sense of responsibility, and the need to compose readable and relevant reports are emphasized. Written comments must be relevant and oriented as a guide to the clinicians. The rotation is designed to build confidence by graduated increases in expectations and responsibility.

Rotation Outline for Residents

The resident is expected to review the study sets available in the department and read about the corresponding topic. This systematic approach will aid residents in their first rotation in cytopathology and will encourage them to become active participators in their learning process.

Week 1, 2	Gynecological cytology, Laboratory management (CLIA, QA)
Week 3	Non-gyn cytology: Fluids (pleural, respiratory, peritoneal)
Week 4	Non-gyn cytology: Fluids (urine, bladder wash, CSF)
Week 5	Fine needle aspiration: Breast, thyroid
Week 6	Fine needle aspiration: Lymph nodes
Week 7	Fine needle aspiration: Salivary glands
Week 8	Fine needle aspiration: Soft tissue

Responsibilities, Expectations and Daily Assignment

The residents' and fellow's responsibilities include reviewing their daily assigned work of gynecologic, medical and fine needle aspiration cases. They are expected to mark the relevant areas on the slides, write a microscopic description and render their diagnosis. The gynecologic cases include smears interpreted as abnormal smears by the cytotechnologists (including reactive change), at least 10% of negative cases, as well as all negative smears from the preceding five years from patients with a newly diagnosed high grade lesion or carcinoma. All cases are reviewed and signed-out with the faculty member assigned to the Service (or the Cytopathology Fellow in the last third of the fellowship) over a multiheaded microscope. Learning to screen is also fundamental in cytology, and the residents and fellows are assigned to screen nongynecologic material starting the second month of their rotation.

Conferences and Teaching Responsibilities

A two year didactic core curriculum has been established and includes Cytology lectures by the GW Cytopathology faculty. One lecture is prepared and given by the cytology fellow. Also invited guest faculty contributes to the curriculum.

The resident and Cytopathology Fellow are responsible of organizing the Cytopathology Unknown Conference once a month and alternate in selecting the cases. The resident will present in the Cytology Case conference once a month during their rotation.

They also encouraged to attend the Surgical Pathology conferences and Specialty Conferences, and the didactic Anatomic and Clinical Pathology Conferences. They are also encouraged to attend the Tumor Board, Breast Tumor Board, ENT conference, the Neuropathology Conferences, Journal Club or any conference listed in our departmental monthly conference schedule or offered by the Institution. A generic list of conferences (which designate the mandatory conferences) is included in the orientation packet, which is provided to all the trainees during the Pathology Department Orientation in July. In addition, a monthly conference list is generated and distributed to all the trainees and faculty.

The Fellow is assigned to teach a Medical student small group session (Second year pathology course) once a week (Wednesday) for a semester. The resident rotating in Cytopathology may be scheduled to teach a small group session during the same semester but not on the same day.

Reading Assignments, Study Sets and Research Activities

Residents and fellows have ready access to study sets, textbooks, journals and other publications. The daily workload provides them with adequate time to read and review the study sets. The *Art and Science of Cytopathology* and *Practical Principles of Cytopathology* by Richard M DeMay, and *Diagnostic principles and clinical correlates* by ES Cibas, and BS Ducatman, Saunders, Third Edition. are the textbooks recommended for reading. The Cytopathology Fellow and residents are also encouraged to participate in the research activities of the Service, to submit abstracts for posters or platform presentation to the National meetings (ASC, USCAP, ASCP, and CAP). Participation in papers or chapters is highly encouraged.

Role of Residents and Fellows as Consultants

The residents and fellows interact frequently with the clinicians and learn to demonstrate the right degree of comfort when discussing cases. They communicate and discuss the results of all malignant, infectious, suspicious and interesting diagnoses with the clinical staff. They also act as consultants to the clinical staff and respond to their inquiries. They frequently discuss and review the cytologic material with clinicians, residents and medical students from other disciplines. The cytopathology faculty members are available for back-up or further discussion as necessary.

Role of Residents and Fellows in Fine Needle Aspirations

The residents and fellows are taught the technique of fine needle aspiration and are encouraged to perform the procedure with appropriate supervision by the staff pathologists. The importance of localizing the lesion and getting adequate material is stressed as being an integral part of reaching a correct diagnosis. Thyroid, breast, lymph nodes, salivary glands, and palpable soft tissue lesions are the most commonly aspirated sites in our Department. Fine needle aspirations of internal organs and nonpalpable deep-seated lesions are performed by the radiologists under roentgenologic or ultrasound guidance. The trainees have the opportunity to attend these procedures.

Cytohistic Correlation

The Cytopathology and Surgical Pathology services interact very closely since most staff members involved in Cytopathology are also involved in Surgical Pathology. Our cytology working draft automatically shows if the patient has any current or previous surgical pathology specimen. As part of the quality assurance program, cytohistic correlation is obtained on all suspicious, malignant, premalignant and interesting cases. All cases showing discrepancy are reviewed and discussed and a discrepant form is filled. The fellow prepares the QA report and presents it to the Quality Assurance Committee that meets twice a year.

The Fellow's Progressive Responsibilities

Both the fellow and the senior resident assigned to the rotation review the daily workload in Cytopathology in its entirety. However, since the fellow spends a year on the service, he/she acquires progressive responsibilities and independence. The fellow is intimately involved in the quality assurance program of the Service, he/she conducts several cytopathology conferences, is responsible for teaching the residents, and towards the end of the fellowship the fellow is given the responsibility of signing-out cases with the residents independently. The following summarizes the graduated responsibilities of the fellow:

In the first third of the fellowship, the fellow signs out cases with very close attending supervision. In the second third, the fellow selects cases to be shown to the attending and signs-out the remaining cases independently. In the last third of the year, the fellow functions as junior staff, they are responsible of signing-out independently, in addition to assuming the teaching responsibilities of the resident rotating on the service by signing-out with him/her, his hers assigned workload. It is important to emphasize that the faculty member covering the service acts as a very close back-up and is ultimately responsible for all the cases. The attending is presented will all cases and report and has the prerogative to review any/all of the cases signed out by the fellow before the attending finalizes the reports.

Pathology Program Policy on Fellows and Residents Duty Hours in Cytopathology

The duties of the Cytopathology Fellow and resident rotating in Cytopathology consist of covering (with attending supervision) the Cytopathology Service from Monday to Friday.

- The fellow's/residents' shift begins at 8:00 AM and ends towards 6:00 PM (varies with the workload)
- The fellow/residents are assigned evenings and night calls* for intraoperative consultations.
- The fellow/residents are assigned week-ends calls* for intraoperative consultations.
- The fellows/residents' assignments are reflected in the monthly Cytopatholgy schedule.

*Residents/fellows do not stay in house to cover night and evenings intraoperative consultations.

Evaluations

- The performance of the Cytopathology fellow and the resident rotating on the Service is regularly assessed by the cytopathology faculty. Their performance and progress are discussed, and they are evaluated on fund of knowledge, cognitive, technical, judgmental, and communication skills. The Cytology Director meets at least twice a year with the fellow and discusses written evaluations with him/her, and meets at least once with the resident toward the end of the rotation.

- When indicated, more frequent meetings take place and suggestions are made or programs are initiated in order to correct weaknesses or deficiencies. During these sessions the trainees are also strongly encouraged to discuss their evaluation of the program.
- The effectiveness of the cytopathology training program is constantly evaluated through different measures: Annual Evaluation of the Pathology Program and the Staff which is completed by all the trainees at the end of the year; During the Anatomic Pathology Quality Assurance and Improvement Committee Meeting (2 times/year), the effectiveness of the fellowship program, goal and objectives are discussed as an agenda item. During their evaluation, the trainees are given ample opportunity by the Director to comment on their educational experience and to offer suggestions for improvement.

Vacation

In addition to the three weeks of vacation, off-service time is provided for meetings, courses, board exam, interviews and moving. A maximum of 10 working days may be approved if all of the above activities are required during the fellowship.

Residents and Fellows Cytopathology Rotation Orientation

The resident/fellow should rescreen the cases (Gyn and NonGyn), mark pertinent areas and write their own assessment. The cases are then signed out with the attending on service. It is preferable to use the stage when screening. The BEST diagnostic slides should be marked with a RED check.

The resident/fellow should ALWAYS check to ensure that the name and the number of each case match on both the glass slides and the requisition form.

Pertinent clinical history obtained in the aspiration room or from clinicians should be added on the working draft.

The resident/fellow screening the case should add next to their initials on the working draft the time and date they finished screening the case.

The resident/fellow screening the case should add next to their initials on the working draft the CPT codes for billing.

The resident/fellow must give feedback to the Cytotechnologist whenever the case is stamped "Feedback" and whenever there is a discrepancy in the interpretation.

Fine Needle Aspiration Schedule: Monday and Thursday patients are scheduled through the main pathology office beginning at 8:30am. However, FNA appointments are available and patients are accommodated on any day when requested.

Documenting the reason for not performing a FNA by issuing a report: Whenever a FNA is not performed on a patient who presents to our FNA Clinic; the pathologist should issue a cytopathology report specifying the reason for not performing the procedure or the reason for re-scheduling the patient (mass not palpable, patient too nervous...).

Reporting Results

Clinicians must be called with results in the following instances:

- Preliminary results of all respiratory specimens submitted to rule out Pneumocystis Sp. Pneumonitis (PJP).
- Final results of the above cases ONLY if different from preliminary.
- ALL malignant diagnoses.
- Infectious organisms in CSF.
- Results of all FNA performed in our Clinic
- Unsuspected cytologic findings.
- STAT cases.
- Suspicious diagnoses.

- Equivocal diagnoses.
- High grade SIL in cervico/vaginal smears.

Any communication with the physician, physician's office or nurse should be recorded on the working draft, and included in the final report.

Daily Workload

For the attending assigned to the Cytopathology service includes:

- Stat cases submitted to the Cytology laboratory by 5:00pm.
- "Rule out PJP" cases submitted to the Cytology laboratory by 3:30pm*.
- All FNA's performed in our clinic that day.
- All Gyn, Medical and Submitted FNA's given to the fellows/residents by 3:00pm Monday to Friday.

* The attending is responsible for rendering a preliminary diagnosis if the GMS stain is not ready. The case will be finalized by the attending on service when the GMS stain is available.

Pathology Consults (adequacy evaluation)

Two different attendings may get involved in the sign out of a case requiring a path consult. The attending that renders a preliminary diagnosis may not necessarily render the final diagnosis if the smears are not coverslipped and reviewed by the resident/fellow by the cut off time. If there is any significant discrepancy between the preliminary and final diagnosis the case should be discussed among the attendings involved in the case, preferably before the report is issued.

OR Weekly Coverage

The fellow covers the OR for intraoperative consultations once a week from 8:00 am to 5:00 pm. This rotation ensures the exposure to cytologic specimens from deep organs (i.e.: lungs, liver, adrenal glands, pancreas, etc), The fellow supervises the resident and renders an immediate evaluation grossly or microscopically. The attending covering the intraoperative consultation service that day is ultimately responsible for the supervision of the fellow and the diagnosis rendered.

On-call Schedule

The fellow during his/her regular rotations at GW (non elective rotations), is scheduled to cover the OR for intraoperative consultation one weekend and two nights (from 5:00 pm to 8:00 am) per month from home. The fellow always has an attending as a back up.

Unknown Cytopathology Conference

The fellows/residents alternate in organizing the cases (6-8 cases) for the Thursday Morning Cytopathology Conference, once a month. Cases with available histologic correlation are preferable. The slides should be available for review by Monday. Residents, fellows and cytotechnologists should attend the conference. The attending or fellow conducts the conference as reflected by the monthly cyto/surgical pathology schedule. Following the conference the fellow/resident should fill the intradepartmental conference quality assurance form (the form is also used to document attendance).

Breast Tumor Board

The fellow is responsible for gathering and presenting the cases for Breast Tumor Board on Mondays at 4:00 pm. This responsibility is shared with the Surgical Pathology fellow.

Teaching/Study Set

Fellow and residents are responsible for adding interesting cases to the study sets. The slide(s) added to the study set **MUST NOT** be the only diagnostic slide of a case (at least two or three other diagnostic slides must be available for the files). Fellows are responsible for making proper packets to store the slides. Each packet should contain the cytology number, the source of specimen, brief history (optional) and the diagnosis of each specimen. A **sample** of the study set packet is located in the "aspiration" study set box. A slide loan request slip must be completed for filing purposes. The residents rotating in Cytopathology must contribute 5 cases to the study sets.

Request for Pulling Slides

A properly completed Cytopathology slide loan request form should be submitted to the office. After you have completed reviewing the case, please return the slides and the slide loan request to the basket marked "Cytopathology slide loan request" in the office file room.

Quality Assurance Measures

The fellow/resident actively participates in the Quality Assurance Program of the Cytopathology Service. The Cytopathology Fellow is also an active member of the Anatomic Pathology Quality Assurance and Improvement Committee. The Committee meets twice per year (October and March). In order to comply with CLIA, CAP and departmental quality assurance requirements, the fellow and the residents need to check or complete the following:

- 1- **The "Pathologist agree box"** on the working draft, should be marked with **"Y"** for yes, or **"N"** for no, to indicate whether the pathologist agrees or not with the cytotechnologist diagnosis. Whenever a disagreement occurs, feedback should be given to the cytotechnologist.
- 2- **Review of previously reported negative Pap smears** within last five years when a diagnosis of high grade squamous intraepithelial lesion HSIL is made. The review should be documented on the "Review of previous negative Pap smears" form. The form should be filled even when a patient with a newly diagnosed HSIL has NO record at GW or when all previous smears were positive. Add on the working draft QA: PR to document that review of record was done.
- 3- **"Follow-up"** box should be checked on the working draft on ALL malignant, suspicious cases, SIL and interesting cases. This will allow obtaining Cytology/Surgical pathology correlation at the end of each quarter.
- 4- **Interinstitutional review form** should be completed by the fellow to document the review diagnosis of cases that are sent for a second opinion.
- 5- When a case is shown to another attending(s) for a second opinion, add on the working draft **QA: attendings initials.**