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FACULTY

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The University of Kansas Medical Center's Department of Pathology and Laboratory Medicine
OUR MISSION
The mission of the Department of Pathology at the University of Kansas is to provide excellent teaching, research, patient care and community service and to meet the health needs of Kansas and the community at large. Our aim is to provide a supportive work environment so that each individual can excel, and pursue avenues that lead to national and international recognition. We will accomplish this by developing mechanisms that make optimal use of our human and financial resources.

Overall goal
Cytopathology Fellowship Training Program at the Kansas University Medical Center (KUUMC) is a one year ACGME accredited training program. The overall goal is to provide a comprehensive education in all aspects of cytopathology.

The core curriculum consists of supervised training with emphasis on increasing fellow responsibility in service-related work, residents and cytotechnologist’s education and research activities. At the completion of the training, the fellow is able to function as a competent and independent cytopathologist, effective communicator, respected professional and leader in education and research, capable of practicing in either academic or private practice setting.

Diversity statement
The University of Kansas School of Medicine is committed to maintaining a diverse and inclusive environment and all that we do will reflect this commitment. Diversity in our classrooms, trainees, faculty, and staff invigorates our efforts to achieve excellence, enhance the quality of life and serve our community and nation. An inclusive environment improves health for all by fostering effective teaching, encouraging the vigorous exchange of ideas, promoting lifelong learning, and supporting high quality scholarship. The University of Kansas School of Medicine is committed to developing culturally proficient physician leaders who are prepared to join the current and future workforce and global economy.

Professionalism and personal conduct
Fellows are expected to demonstrate conduct consistent with the dignity and integrity of the medical profession at all times. It is expected that fellows will abide by institutional policies that govern conduct including GME, university, hospital, and UKP.

Fellows should always strive to reach the highest standards of excellence in their learning, patient-centered clinical practice, teaching and research.
The components of professionalism, outlined by the University of Kansas School of Medicine’s Professionalism Initiative (found at http://www.kumc.edu/som/professionalism.html), are:

- Altruism,
- Accountability,
- Excellence,
- Duty,
- Honor and Integrity,
- Respect, and
- A Commitment to lifelong learning.

The fellow will, in a timely fashion, fulfill his/her professional responsibilities. Failure to fulfill clinical, academic, and administrative duties, including completion of patient charts and duty hours logging, can result in remediation or disciplinary action, including suspension of any or all privileges.

The fellow will strive for personal growth and improvement, and accept criticism with dignity, seek to be aware of his/her own inadequacies, be open to change, accept responsibility for his/her own errors or failures, and stray from displaying a poor attitude under stress.

The fellow will maintain appropriate relationships with other individuals, especially those encountered as a result of their clinical training.

Each fellow will protect and respect the ethical and legal rights of patient.

The fellow will abide by the policies and procedures governing Graduate Medical Education.

The fellow will, in a timely fashion, clearly communicate all information relevant to the safe, effective and compassionate care of their patients to their supervising staff.
Both fellows and faculty are expected to fulfill their professional responsibility as a physician to appear for duty appropriately rested and fit to provide the services required by their patients.

Both program and KUMC leadership will help ensure a culture of professionalism that supports patient safety and personal responsibility. Both residents and faculty must demonstrate an understanding and acceptance of their personal role in:

- Assurance of the safety and welfare of patients entrusted to their care;
- Provision of patient- and family-centered care;
- Assurance of their fitness for duty;
- Management of their time before, during, and after clinical assignments;
- Recognition of impairment, including illness and fatigue, in themselves and in their peers;
- Attention to lifelong learning;
- The monitoring of their patient care performance improvement indicators; and,
- Honest and accurate reporting of duty hours, patient outcomes and clinical experience data.

Both fellows and faculty must be responsive to patient needs that supersedes self-interest. Physicians must recognize that under certain circumstances, the best interests of the patient may be served by transitioning that patient’s care to another qualified and rested provider.

The fellow’s personal appearance while on duty, or in areas where contact with patients or their families is possible, shall be neat, clean, professional and in accordance with general University of Kansas Hospital policies. Any fellow may be asked to return home to change clothing on his/her own time. Failure to follow standards may result in disciplinary action up to and including suspension of the fellow from the program.

The Medical Center identification badge (or corresponding ID badge of an affiliate institution) and nametag are to be worn visibly whenever the resident is involved in clinical or administrative activities.
CYTOPATHOLOGY EDUCATION

SUPERVISION
Cytopathology faculty are all board certified by the American Board of Pathology. Program faculty also have added certification in Cytopathology. Supervision of fellows is direct and indirect, but a faculty member is always available, i.e. 24 hours a day, 7 days a week. Fellows and faculty should inform patients of their respective roles in each patient’s care.

Methods of Supervision

<table>
<thead>
<tr>
<th>RESIDENTS IN FINAL YEARS OF TRAINING</th>
<th>LEVEL of SUPERVISION</th>
<th>ACTIVITIES /PROCEDURES (as defined by RRC and Program)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIRECT</td>
<td>Sign-out of all cases.</td>
<td></td>
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<tr>
<td>INDIRECT A (with direct supervision immediately available)</td>
<td>FNA and immediate evaluation of cytology specimens.</td>
<td></td>
</tr>
<tr>
<td>INDIRECT B (with direct supervision available)</td>
<td>FNA and immediate evaluation of cytology specimens</td>
<td></td>
</tr>
<tr>
<td>OVERSIGHT (with direct supervision available)</td>
<td>None.</td>
<td></td>
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RRC requirements

<table>
<thead>
<tr>
<th>RRC APPROVED LICENSED INDEPENDENT PRACTITIONER SUPERVISOR (PR VI.D.1)</th>
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<tbody>
<tr>
<td>Core physician faculty must:</td>
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<tr>
<td>■ be ABP who are clinically active, either</td>
</tr>
<tr>
<td>in direct patient care or in the supervision of patient care</td>
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<tr>
<td>■ dedicate an average of 10 hours per week throughout the</td>
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<tr>
<td>year to fellow training</td>
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<tr>
<td>■ be trained in the evaluation and assessment of the</td>
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<tr>
<td>competencies;</td>
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<tr>
<td>■ spend significant time in the evaluation of the residents</td>
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<tr>
<td>including direct observation of residents with patients; and</td>
</tr>
<tr>
<td>advise residents with respect to their career and</td>
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<tr>
<td>educational goals</td>
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Certification in the primary specialty refers to ABMS Board Certification. Certification for the secondary specialty refers to sub board certification.

OPTIMAL CLINICAL WORKLOAD (PR VI.E.)
| No new language has been added and the existing program monitors clinical workload. | MEMBERS OF THE INTERPROFESSIONAL TEAM (PR VI.F.) |
| No new language has been added. | COMPETENCIES TO ALLOW PGY1 RESIDENTS TO PROGRESS TO INDIRECT SUPERVISION (PR VI.D.5.a). (1) |
| N/A | DEFINING RESIDENT LEVELS “INTERMEDIATE LEVEL” and “FINAL YEARS OF TRAINING” *For establishing the minimum rest period between duty periods* (PR VI.G.5.b and c) |
| Pathology subspecialty trainees are in their final years of training. | While no new language has been added for residents in their final years of training we adhere to the minimum number of rest hours between duty periods is 8 hours standard. |
| CIRCUMSTANCES WHEN RESIDENTS IN THEIR FINAL YEARS OF EDUCATION MAY REMAIN OR RETURN IN < 8 HOURS (PR VI.G.5.c)(1) | Fellows may stay on duty or return to the hospital to perform fine needle aspiration or for immediate evaluation of cytopathology procedures. |
| DEFINED MAXIMUM NUMBER OF CONSECUTIVE WEEKS AND MAXIMUM NUMBER OF MONTHS PER YEAR OF IN-HOUSE NIGHT FLOAT (PR VI.G.6.) | N/A |
| Program-specific guidelines for circumstances and events in which residents must communicate with appropriate supervising faculty (PR VI.D.5) | Source of specific criteria and/or specific national standards-based criteria used to evaluate each resident’s abilities (PR VI.D.4.a) |
| 1. Complications from FNA procedure, such as a pneumothorax 2. Unexpected malignant diagnosis which require immediate therapy | Not yet available. |
PROGRAM LEARNING GOALS AND OBJECTIVES

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.) Months 1-3.

BY CYTOLOGIC CATEGORY AND OUTCOMES

GYNECOLOGIC CYTOLOGY

<table>
<thead>
<tr>
<th>CORE COMPETENCY: PATIENT CARE</th>
<th>Measures/Outcomes:</th>
</tr>
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</table>
| **Goal:**
*Fellows must demonstrate a satisfactory level of diagnostic competence and the ability to provide appropriate and effective consultation in the context of pathology services*                                                                 | **Direct observation** |
| **Objectives:**                                                                             | **Review of patient reports**                                                                 |
| • Recognize personal limitations and level of diagnostic abilities and seek consultation for attendings or others as appropriate |
| • Demonstrate competency in interpreting diagnostic information and test results within the clinical context for effective patient care |
| • Examine any gynecologic cytopathology specimen and properly classify it according to The Bethesda System 2001 |
| • Explain and demonstrate the proper composition of a clear, concise and complete pathology report |
| • Demonstrate competency in recognizing and applying evidenced based cytomorphologic criteria. |
| • Demonstrate proficiency in gathering essential and accurate clinical and laboratory information related to patient specimens and procedures. |
| • Demonstrate competency in advising patient care team on choice of clinically appropriate, cost-effective tests |
| • Demonstrate competency in communicating and advising follow up for unexpected test results |

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<tr>
<th>CORE COMPETENCY: MEDICAL KNOWLEDGE</th>
<th>Measures/Outcomes:</th>
</tr>
</thead>
</table>
| **Goal:**
*Demonstrate knowledge about established and evolving biomedical, | **Direct observation** |
| **Objectives:**                                                                             | **Review of patient reports**                                                                 |
|                                                                                           | **Rotation Evaluation (≥ 3 rating on competencies assessed)** |
|                                                                                           | **Formative and summative evaluation** |
|                                                                                           | **Case log review** |
|                                                                                           | **360° evaluation** |
clinical and cognitive (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to pathology

Objectives:
- Explain the differences among conventional smear and liquid-based preparations in gynecologic cytopathology
- Demonstrate knowledge of the current Bethesda System terminology for reporting on gynecologic cytopathology specimens, and of the principles and application of human papillomavirus probe analysis.
- Demonstrate proficiency in the interpretation of negative, atypical, dysplastic, carcinoma in-situ and invasive carcinoma for squamous and glandular lesions of gynecological origin.
- Understand procedures of quality assurance in gynecologic cytology, including the 5-year look backs, 10% rescreening, and correlation of gynecologic cytopathology with surgical pathology, both in aggregate for quality assurance purposes and on a case-by-case basis for diagnostic purposes.
- Demonstrate proficiency in collecting and evaluating medical evidence relevant to gynecologic cytology.
- List the various microbiological, immunocytochemical and molecular diagnostic techniques for confirmation of human papilloma virus and other infectious organisms common in gynecologic specimens and appropriately recommend their use in a cost effective manner
- Demonstrate an understanding of basic cytopreparatory techniques
- Demonstrate proficiency using information technology and a variety of resources to support patient care decisions, maintain and update medical knowledge.

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<tr>
<th>CORE COMPETENCY: PRACTICE BASED LEARNING AND IMPROVEMENT</th>
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<tr>
<td><strong>Goal:</strong> Demonstrate the ability to investigate and evaluate their diagnostic and consultative practices, appraise and assimilate scientific evidence and improve their patient care practices.</td>
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<tr>
<td><strong>Objectives:</strong></td>
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<table>
<thead>
<tr>
<th>Measures/Outcomes:</th>
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</thead>
<tbody>
<tr>
<td>• Mock CAP inspection</td>
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<tr>
<td>• Attendance at a</td>
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- Demonstrate knowledge of how to apply concepts of quality control, quality improvement, risk management, and of regulatory compliance including correct coding as these pertain to the practice of cytopathology.
- Demonstrate competency in the knowledge of the principles of quality improvement and quality assurance and participate in QI/QA activities as required.
- Demonstrate proficiency in identifying process improvements that minimize opportunities for medical errors.
- Demonstrate competency in understanding the principles of disease prevention

**CORE COMPETENCY: SYSTEM BASED PRACTICE**

**Goal:**
*Fellows 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*

**Objectives:**
- Demonstrate understanding of the role of the diagnostic clinician as a member of the healthcare team.
- Demonstrate an understanding of the health care system as a whole and in the context of cytopathology.
- Demonstrate competency in understanding and application of CAP accreditation standards regarding the practice of cytology
- Demonstrate competency in knowledge and compliance with CLIA, JCAHO, FDA and other federal, state and hospital regulations regarding the practice of cytology.
- Demonstrate understanding of the importance of reliable, cost-effective and timely results in clinical decision making
- Demonstrate at least understanding of reimbursement, including compliance with Medicare/Medicaid “fraud and

**Measures/Outcomes:**
- Perform mock CAP site visit
- Chalk Safety modules score 85%
- Attend 75% of cytopathology management/QA meetings
- 360° evaluation
abuse” and kickback avoidance

- Demonstrate and understanding of effective laboratory management

**CORE COMPETENCY: INTERPERSONAL AND COMMUNICATION SKILLS**

**Goal:**
*Demonstrate interpersonal and communication skills that result in effective information exchange and teaming with other health care providers, patients and patients’ families.*

**Objectives:**
- Demonstrate competency in counseling and educating patients and family members.
- Demonstrate competency in functioning effectively as a member of the clinical care team.
- Demonstrate competency in preparing and delivering effective presentations.
- Demonstrate ability to use all appropriate modes of communication (in person, telephone, email, written) in a timely and professional manner.
- Demonstrate proficiency in communicating clearly and effectively in both written and spoken forms.

**Measures/Outcomes:**
- Direct observation
- Evaluation of presentations
- 360° evaluation

**CORE COMPETENCY: PROFESSIONALISM**

**Goal:**
*Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles and sensitivity to a diverse patient population.*

**Objectives:**
- Demonstrate understanding of the ethical and confidentiality issues related to patient care.
- Demonstrate knowledge of issues of cultural competency in the delivery and practice of healthcare.
- Demonstrate competency in privacy regulations regarding use of protected health information.
- Demonstrate competency in maintaining a professional demeanor in speaking, listening, appearance, acceptance of responsibility and responding effectively to constructive criticism.

**Measures/Outcomes:**
- Direct observation
- Chalk HIPAA modules score 85%
- Chalk Understanding Fatigue and Sleep Deprivation Modules score 85%
- Rotation Evaluation (≥ 3...
• Demonstrate competency in hospital policies, e.g. informed consent, EEO, disruptive physician policy, etc.

• Demonstrate competency in understanding of Fatigue and Sleep Deprivation

Rating on competencies assessed:

• 360° evaluation

Resources


3. American Society for Colposcopy and Cervical Pathology Consensus Guidelines  
http://www.asccp.org/consensus.shtml

4. KUMC Study Sets

5. KUMC Information Resources: Online Clinical Resources  
http://library.kumc.edu/clinicalreference.html

6. KUMC Chalk online training modules (go to myKUMC log on)

7. Information for Faculty and Staff  http://www.kumc.edu/faculty.html
# Non-Gynecologic Cytopathology

## Core Competency: Patient Care

**Goal:**  
Fellows must demonstrate a satisfactory level of diagnostic competence and the ability to provide appropriate and effective consultation in the context of pathology services.

**Objectives:**
- Recognize personal limitations and level of diagnostic abilities and seek consultation for attendings or others as appropriate.
- Examine and properly classify fine needle aspiration and exfoliative cytology specimens from various organ sites using the current laboratory system.
- Demonstrate competency in interpreting diagnostic information and test results within the clinical context for effective patient care.
- Demonstrate competency in recognizing and applying evidenced-based cytomorphologic criteria.
- Demonstrate proficiency in gathering essential and accurate clinical and laboratory information related to patient specimens and procedure.
- Explain and demonstrate the proper composition of a clear, concise and complete pathology report.
- Explain and demonstrate the proper interpretation and triage of cytopathology specimens during immediate assessments, including determination of adequacy and any necessary ancillary techniques and the appropriate collection of additional diagnostic materials for such techniques.
- Demonstrate competency in advising patient care team on choice of clinically appropriate, cost-effective tests.
- Demonstrate competency in reporting and advising follow up for unexpected test results.

**Measures/Outcomes:**
- Direct observation
- Review of patient reports
- Rotation Evaluation (≥ 3 rating on competencies assessed)
- Formative and summative evaluation
- Case log review
- 360° evaluation

## Core Competency: Medical Knowledge

**Goal:**  
Demonstrate knowledge about established and evolving biomedical, clinical and cognitive (e.g. epidemiological and social-behavioral).

**Measures/Outcomes:**
- Pre and post slide
**Objectives:**
- Demonstrate knowledge of the current laboratory diagnostic classification system.
- List the common inflammatory etiologies and identify their presentation in non-gynecologic specimens from various organ sites.
- List the criteria for limited and unsatisfactory non-gynecologic cytopathology specimens and appropriately communicate these criteria and their significance to others.
- Demonstrate proficiency in collecting and evaluating medical evidence relevant to FNA and exfoliative cytology.
- Explain the importance of cytopathologic and histologic correlation.
- Demonstrate an understanding of basic cytopreparatory techniques.
- Demonstrate knowledge of specialized diagnostic procedures, including special staining techniques, electron microscopy, immunofluorescence, immunohistochemistry and molecular diagnostics.
- Demonstrate knowledge of common clinical and diagnostic procedures, their application and correlation.
- Demonstrate proficiency using information technology and a variety of resources to support patient care decisions, maintain and update medical knowledge.
- List and identify the causes of common artifacts related to specimen preparation and explain these causes and to manage such problems for diagnostic and quality assurance purposes.

---

**CORE COMPETENCY: PRACTICE BASED LEARNING AND IMPROVEMENT**

**Goal:**
*Demonstrate the ability to investigate and evaluate their diagnostic and consultative practices, appraise and assimilate scientific evidence and improve their patient care practices.*

**Objectives:**
- Demonstrate knowledge of how to apply concepts of quality control, quality improvement, risk management, and information technology.

**Measures/Outcomes:**
- Attendance at a minimum of 75% of cytopathology management/QA meetings.
and of regulatory compliance including correct coding as these pertain to the practice of cytopathology.

- Demonstrate competency in the knowledge of the principles of quality improvement and quality assurance and participate in QI/QA activities as required.
- List and explain various causes of specimen identification errors and specimen contaminants
- Demonstrate proficiency in identifying process improvements that minimize opportunities for medical errors.
- Demonstrate competency in understanding the principles of disease prevention

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<tr>
<th>CORE COMPETENCY: SYSTEM BASED PRACTICE</th>
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<tr>
<td><strong>Goal:</strong></td>
</tr>
<tr>
<td><em>Fellows 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</em>**</td>
</tr>
<tr>
<td><strong>Objectives:</strong></td>
</tr>
<tr>
<td>• Demonstrate understanding of the role of the diagnostic clinician (pathologist) as a member of the healthcare team.</td>
</tr>
<tr>
<td>• Demonstrate ongoing identification and remediation of gaps in personal fund of knowledge</td>
</tr>
<tr>
<td>• Explain and demonstrate the proper prioritization of workflow so that the most urgent cases are processed and examined first</td>
</tr>
<tr>
<td>• Demonstrate an understanding of the health care system as a whole and in the context of cytopathology.</td>
</tr>
<tr>
<td>• Demonstrate competency in understanding and application of CAP accreditation standards regarding the practice of cytology</td>
</tr>
<tr>
<td>• Demonstrate competency in knowledge and compliance with JCAHO, FDA and other federal, state and hospital regulations regarding the practice of cytology.</td>
</tr>
<tr>
<td>• Demonstrate understanding of the importance of reliable, cost-effective and timely results in clinical decision making</td>
</tr>
<tr>
<td>• Demonstrate at least understanding of reimbursement, including compliance with Medicare/Medicaid “fraud and abuse” and kickback avoidance</td>
</tr>
</tbody>
</table>

| Measures/Outcomes:                     |
| • Perform mock site visit             |
| • Chalk Safety modules score 85%      |
| • Attend 75% of cytopathology management/QA meetings |
| • 360° evaluation                     |
- Demonstrate and understanding of effective laboratory management

**CORE COMPETENCY: INTERPERSONAL AND COMMUNICATION SKILLS**

**Goal:**
*Demonstrate interpersonal and communication skills that result in effective information exchange and teaming with other health care providers, patients and patients’ families.*

**Objectives:**
- Demonstrate competency in counseling and educating patients and family members.
- Demonstrate competency in functioning effectively as a member of the clinical care team.
- Demonstrate competency in preparing and delivering effective presentations.
- Demonstrate ability to use all appropriate modes of communication (in person, telephone, email, written) in a timely and professional manner.
- Demonstrate proficiency in communicating clearly and effectively in both written and spoken forms.

**Measures/Outcomes:**
- Clinical observation
- Rotation Evaluation (> 3 rating on competencies assessed)
- Portfolio review
- 360° evaluation

**CORE COMPETENCY: PROFESSIONALISM**

**Goal:**
*Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles and sensitivity to a diverse patient population.*

**Objectives:**
- Demonstrate understanding of the ethical and confidentiality issues related to patient care.
- Demonstrate knowledge of issues of cultural competency in the delivery and practice of healthcare.
- Demonstrate competency in privacy regulations regarding use of protected health information.
- Demonstrate competency in maintaining a professional demeanor in speaking, listening, appearance, acceptance of responsibility and responding effectively to constructive criticism.
- Demonstrate competency in hospital policies, e.g. informed consent, EEO, disruptive physician policy, etc.

**Measures/Outcomes:**
- Chalk HIPAA modules score 85%
- Chalk Understanding Fatigue and Sleep Deprivation Modules score 85%
- Rotation Evaluation (> 3 rating on competencies assessed)
Resources

9. KUMC Study Sets
10. KUMC Information Resources: Online Clinical Resources
    http://library.kumc.edu/clinicalreference.html
11. KUMC Chalk online training modules (go to myKUMC log on)
12. Information for Faculty and Staff http://www.kumc.edu/faculty.html
## FINE NEEDLE ASPIRATION CYTOPATHOLOGY

<table>
<thead>
<tr>
<th>Competency</th>
<th>Goals and Objectives</th>
<th>Assessment Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient Care</strong></td>
<td>• Perform physical examination.</td>
<td>Clinical Performance</td>
</tr>
<tr>
<td></td>
<td>• Interpret mammographic and ultrasound studies.</td>
<td>Ratings</td>
</tr>
<tr>
<td></td>
<td>• Perform and interpret FNAs and core biopsies, including ultrasound-guided procedures.</td>
<td>In-House Written</td>
</tr>
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<td></td>
<td>• Perform on-site evaluation and issue preliminary diagnosis for radiologists.</td>
<td>Exams</td>
</tr>
<tr>
<td></td>
<td>• Understand the relationship between pathologic findings and the provision of effective and appropriate patient management and therapy, including the ability to gather and integrate clinical information into the diagnostic process.</td>
<td>Portfolio review</td>
</tr>
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<td></td>
<td>• Determine specimen adequacy and identify significant cyto-morphologic abnormalities, according to specimen type.</td>
<td>PEC</td>
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<td>• Prepare cytologic specimens by different methods and utilizing basic stains.</td>
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<td></td>
<td>• Render a clinically-useful diagnosis and recommendations, utilizing established cytomorphologic criteria by specimen type.</td>
<td></td>
</tr>
<tr>
<td><strong>Medical Knowledge</strong></td>
<td>• Demonstrate knowledge in cytopathology science, practice of fine needle aspiration, and correlation with clinical medicine, radiology, and histology</td>
<td>Clinical Performance</td>
</tr>
<tr>
<td></td>
<td>• Apply this knowledge to patient care.</td>
<td>Ratings</td>
</tr>
<tr>
<td><strong>Practice-Based Learning and Improvement</strong></td>
<td>• Locate, evaluate and assimilate criteria from scientific cytopathology studies to arrive at an accurate cytopathology diagnosis.</td>
<td>Clinical Performance</td>
</tr>
<tr>
<td></td>
<td>• Participate actively in conferences, with case presentations which facilitate the learning of</td>
<td>Ratings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Portfolio</td>
</tr>
</tbody>
</table>
- Compare cytopathology morphology and diagnosis with subsequent and/or concurrent histopathology morphology diagnosis to clinical follow-up and, in the absence of subsequent/concurrent histopathology specimens, to response to therapy.
- Perform fine needle aspirations and core biopsies of palpable masses and under sonographic guidance.
- Utilize laboratory information systems and other data collection methods appropriately for the review of patient cases and for case presentations.
- Identify of personal strengths and weaknesses, and implementation of strategies to enhance their knowledge and skills and processes affecting patient care.

| Interpersonal and Communication Skills | Develop consultation skills, including effective communication with members of the clinical team.  
Demonstrate effective communication when interacting with laboratory management, technical staff, pathology assistants, and secretarial support.  
Utilize effective verbal and non-verbal communication skills when teaching or presenting cases to students, residents, and/or attending staff.  
Create and maintain sound relationships with clinicians, radiologists, nurses, technical and clerical staff, and other healthcare professionals. | Clinical Performance Ratings  
Presentation critiques  
360° evaluation |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Professionalism</td>
<td>Demonstrate ethical and sensitive behavior in their interactions with patients, colleagues and the technical staff.</td>
<td>Clinical Performance Ratings</td>
</tr>
</tbody>
</table>
- Demonstrate an understanding of regulatory requirements and good laboratory practice.
- Accept professional responsibilities for cases and tasks assigned.
- Exhibit a commitment to professional excellence.
- Maintain all aspects of patient confidentiality as set forth by hospital policy and HIPPA regulations.

| Systems-Based Practice | • Demonstrate an understanding of how FNA services impact on the delivery of patient care within the complex health care system.  
• Demonstrate involvement in Performance Improvement activities. | 360° Assessment  
Clinical Performance Ratings  
In-House Written Exams  
PEC |
## RESEARCH ROTATION

### CORE COMPETENCY: PRACTICE BASED LEARNING AND IMPROVEMENT

**Goal:**
*Understand how to design a research project, including formulating a hypothesis and designing an experimental strategy to evaluate it.*

**Objectives:**
- Demonstrate competence in evaluating relevant literature related to a specific research question, including type of research model and evaluation of the appropriate use of statistics
- Demonstrate competence in formulating a testable hypothesis
- Demonstrate familiarization with appropriate statistical methods to be used for data analysis
- Learn to recognize and make contingency plans for potential problems in a research plan
- Ability to understand how clinical and basic science research results influence clinical practice

**Measures/Outcomes:**
- Completion of Introduction to research course
- Journal Club Observation
- Case presentations

**Rotation Evaluation**
(≥ 3 rating on competencies assessed)

---

**Goal:**
*Learn to execute a clinical and/or a basic science research project, including mastering the appropriate technical skills required for completion of the project and.*

**Objectives:**
- Demonstrate competence in the appropriate methods for execution of a basic science project, including tissue processing, physiological recording, etc.
- Demonstrate competence in troubleshooting technical problems and evaluating their impact on projects
- Demonstrate competence in data collection and organization for subsequent evaluation
- Demonstrate understanding of statistical analysis of data collected
- Learn to evaluate results for a given project in the context of other work in the research area
- Competence in proposing future experiments to augment results from a given project

**Measures/Outcomes:**
- Research project presented for Resident/Postdoc/Fellow research day

**Rotation Evaluation**
(≥ 3 rating on competencies assessed)
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.) Months 4-12.

BY KNOWLEDGE AND SKILL ACQUISITION

GYNECOLOGIC AND NON-GYNECOLOGIC CYTOPATHOLOGY

GOAL:
The goal is to produce a fellow who is proficient in all aspects of exfoliative cytology, demonstrates sufficient competence to practice without direct supervision and would be able to serve as an expert.

Core Competency Patient Care
Fellows must demonstrate a satisfactory level of diagnostic competence and the ability to provide appropriate and effective consultation in the context of pathology services.

At the conclusion of training in Cytopathology, the fellow should

- Obtain pertinent clinical information using all appropriate resources (chart examination, EPIC notes, correlation with previous and concurrent histologic material, consultation with radiologists and clinicians)
- Demonstrate competency and knowledge of clinical and diagnostic procedures utilized for patient management
- Demonstrate competency in interpreting diagnostic information and test results within the clinical context for effective patient care
- Demonstrate proficiency using information technology and a variety of resources to support patient care decisions
- Complete cases in a timely fashion
- Demonstrate competency in recommending appropriate clinical follow-up

Core Competency Medical Knowledge
Fellows 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.
OBJECTIVES:

At the conclusion of training in Cytopathology, the fellow should

- Recognize clinical methods of procurement of various gynecologic and non-gynecologic and specimens
- Demonstrate knowledge of methods of fixation, preparation and staining of the different types of cytologic preparations including conventional smears, liquid-based preparations, cytospins and cell blocks
- Recognize the differences and the utility of these preparations in exfoliative cytology
- Demonstrate the knowledge and skills necessary for independent microscopic review of exfoliative cytology specimens
- Demonstrate the knowledge of the Bethesda System 2001 for reporting of Pap tests and ASCCP patient management guidelines
- Be proficient in recognizing normal, reactive, infectious, pre-neoplastic, and malignant cellular elements
- Be proficient in recognizing quality indicators and criteria for satisfactory and unsatisfactory specimens
- Recognize specimen artifacts and contaminants and how to resolve such technical problems
- Demonstrate the knowledge of the principles and application of various ancillary techniques applied to cytopathology including microbiological, immunocytochemical, molecular (FISH and PCR), and flow cytometry techniques
- Demonstrate knowledge of the types, techniques and utility of HPV tests in gynecologic cytology
- Demonstrate the ability to conduct a clinical or basic science research project and draft a manuscript suitable for publication
- Demonstrate the ability to present research findings at a scientific meeting
- Develop a personal strategy to regularly maintain and update medical knowledge

Core Competency Practice-based Learning and Improvement

Fellows 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.

OBJECTIVES

At the conclusion of training in Cytopathology, the fellow should
• Be familiar with the responsibilities of the cytotechnologists and technicians in terms of specimen preparation and screening of specimens
• Demonstrate the knowledge and skills necessary for independent microscopic review of exfoliative cytology specimens (both prior to and after screening by cytotechnologists)
• Be able to provide correct diagnosis on substantive percentage of exfoliative cytology cases
• Recognize the importance of cytology-histology correlations
• Be proficient in the current recommendations on cervical cancer screening and HPV DNA test utilization
• Demonstrates understanding of key issues pertaining to laboratory management, administration, quality assurance (QA) and quality control procedures
• Demonstrates competency in identifying process improvements that minimize chances for medical errors
• Use progressive scholarship and professional growth for direct and visual supervision of residents rotating in cytology

Core Competency System Based Practice
Fellows 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.

OBJECTIVES
At the conclusion of training in Cytopathology, the fellow should

• Demonstrate an understanding of healthcare system as a whole and in the context of cytopathology
• Explain the principles of quality improvement relating to cytopathology
• Explain the government regulations for State, CLIA, CAP, JCAHO, HIPPA/Data security requirements for practice management
• Demonstrate an understanding of basic billing requirements (ICD-9 and CPT codes) and re-imbursement policies in compliance with Medicare and Medicaid
• Be familiar with regional and national proficiency standards for cytopathologists and cytotechnologists

Core Competency Interpersonal and Communication Skills
Fellows 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.

OBJECTIVES:
At the conclusion of training in Cytopathology, the fellow should

• Function effectively as a member of clinical care team with clinicians, radiologists, nurses and technical staff
• Interact effectively with administrative, secretarial, and technical support staff
• Demonstrate clear and effective communication with clinicians in written reports and oral communications and in conferences
• Appropriately use and respond to e-mail and other electronic communications

Core Competency Professionalism
Fellows must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles and sensitivity to a diverse patient population.

OBJECTIVES:
At the conclusion of training in Cytopathology, the fellow should

• Demonstrate an understanding of HIPAA and hospital guidelines pertaining to ethical and confidentiality issues related to patient care
• Abide university and hospital EEO policies and procedures.
• Demonstrate respect, regard, and integrity; a responsiveness to the needs of patients and society that supersedes self-interest; assume responsibility and act responsibly; and demonstrate a commitment to excellence and on-going professional development.
• Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.
• Demonstrate sensitivity and responsiveness to diversity, including awareness of their own, their patients’ and colleagues' ethnic, culture, age, gender, and disabilities.
• Exhibit a professional demeanor in terms of appearance, conduct, attitude, and communication
• Demonstrate competency in acceptance of responsibility and responding effectively to constructive criticism
• Demonstrate knowledge of issues of cultural competency in the delivery and practice of healthcare
• Demonstrate competency in completing service responsibilities in a timely manner to benefit patient care
• Be responsive to faculty and staff suggestions for improvement
• Demonstrate proficiency in presenting relevant cytologic information at clinical conferences

FINE NEEDLE ASPIRATION (FNA)

Goal:
The goal is to produce a fellow who is proficient in all aspects of fine needle aspiration cytology, demonstrates sufficient competence to practice without direct supervision and would be able to serve as an expert.

Core Competency Patient Care
Fellows must demonstrate a satisfactory level of diagnostic competence and the ability to provide appropriate and effective consultation in the context of pathology services.

OBJECTIVES:
At the conclusion of training in Cytopathology, the fellow should be able to:

• Obtain pertinent clinical information using all appropriate resources (chart examination, EPIC notes, correlation with previous and concurrent histologic material, consultation with radiologists and clinicians)
• Explain the FNA procedure as well as its benefits and potential complications to patients in a clear, concise, and professional manner in order to obtain informed consent
• Demonstrate compassion, professionalism and proficiency when performing FNA procedure under attending supervision
• Recognize the importance of “Time out” procedure for FNA including, accurate patient identification and confirmation of FNA site
• Clinically assess the lesion(s) to be aspirated by physical examination
• Demonstrate competence in interpreting diagnostic information and test results within the clinical context for effective patient care
• Explain and demonstrate the proper interpretation and triage of FNA specimens during immediate microscopic assessments
• Demonstrates proficiency in collecting additional diagnostic material for ancillary tests to reach an optimal diagnosis for appropriate patient care
• Provide adequate after-care to patients. This includes attending to FNA biopsy site, responding to questions or concerns, providing reassurance as needed, and advising follow-up with referring clinicians under the supervision of an attending cytopathologist

Core Competency Medical Knowledge
Fellows 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.

OBJECTIVES:
At the conclusion of training in Cytopathology, the fellow should be able to:

• Demonstrate proficiency in collecting and evaluating medical evidence relevant to FNA
• Explain the clinical indications for and limitations of FNA
• Demonstrate competency and knowledge of diagnostic procedures and their application in FNA
• Be able to correctly perform FNA under the supervision of cytopathology attending
• Demonstrate an understanding of methods of fixation and basic cytopreparatory techniques including direct smears, liquid-based preparations, cytospins and cell block
• Demonstrate knowledge of preparation and staining of smears utilized in immediate adequacy assessment of FNA specimen
• Demonstrate competency in the immediate microscopic evaluation of FNA, both superficial and image-guided procedures
• Demonstrate knowledge for appropriate triage of FNA material for ancillary studies including microbiology, flow cytometry and immunohistochemistry
• Demonstrate knowledge in advising patient care team on choice of clinically appropriate tests including needle core biopsy, pertinent blood tests or imaging studies, under the supervision of cytopathology attending
• Provide provisional diagnosis to attending physicians under the supervision of cytopathology attending
• Explain the importance of cytopathologic and histologic correlation
• Demonstrate the ability to conduct a clinical or basic science research project and draft a manuscript suitable for publication
• Demonstrate the ability to present research findings at a scientific meeting
• Develop a personal strategy to regularly maintain and update medical knowledge

Core Competency Practice-based Learning and Improvement
Fellows 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.

OBJECTIVES:
At the conclusion of training in Cytopathology, the fellow should be able to:
• Know instruments and materials needed to perform FNA
• Have performed 30 diagnostic superficial FNA biopsies under the supervision of an attending cytopathologist
• Demonstrate the knowledge and skills necessary for independent (primary) microscopic review of FNA specimens
• Be proficient in recognizing normal, reactive, infectious and neoplastic lesions
• Recognize specimen artifacts and contaminants and how to resolve such technical problems
• List and explain various causes of specimen identification errors
• Explain the importance of correlation with previous and concurrent histologic material, consultation with radiologists and clinicians
• Explain the principles of quality improvement and quality assurance, risk management, and of regulatory compliance including correct coding as these pertain to the practice of cytopathology
• Read relevant cytopathology textbooks and journal articles pertaining to cases
• Demonstrate proficiency in supervision of residents rotating in cytology

Core Competency Systems-based Practice
Fellows 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.

OBJECTIVES:
At the conclusion of training in Cytopathology, the fellow should be able to:

• Demonstrate understanding of the role of the diagnostic clinician (pathologist) as a member of the healthcare team
• Explain the role of FNA in the overall evaluation, diagnosis, and management plan of patients
• Demonstrate understanding of the importance of reliable, cost-effective and timely results in clinical decision making
• Explain basic billing requirements (ICD-9 and CPT coding) for FNA
• Demonstrate an understanding of healthcare system as a whole and in the context of cytopathology
• Explain the government regulations for CLIA, CAP, JCAHO, HIPPA/Data security requirements for practice management
• Demonstrates knowledge of and participates as appropriate in laboratory and hospital-wide quality improvement programs
• Is familiar with regional or national proficiency standards for cytopathology technologists and pathologists
• Is knowledgeable about use of information systems and other means used to document and disseminate cytopathology results
• Demonstrate ongoing identification and remediation of gaps in personal fund of knowledge

Core Competency Interpersonal and Communication Skills
Fellows 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.

OBJECTIVES:
At the conclusion of training in Cytopathology, the fellow should be able to:

• Communicate effectively with patients and family members providing necessary information in clear, concise and professional manner.
• Function effectively as a member of clinical care team with clinicians, radiologists, technical support staff and administrative personnel
• Demonstrate clear and effective communication with clinicians in written reports and oral communications and in conferences
• Communicate effectively with other health-care professionals including nurses, technologists, and others

Core Competency Professionalism
Fellows must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles and sensitivity to a diverse patient population.

OBJECTIVES:
At the conclusion of training in Cytopathology, the fellow should be able to:
• Abide university and hospital EEO policies and procedures.
• Demonstrate respect, regard, and integrity; a responsiveness to the needs of patients and society that supersedes self-interest; assume responsibility and act responsibly; and demonstrate a commitment to excellence and on-going professional development.
• Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.
• Demonstrate sensitivity and responsiveness to diversity, including awareness of their own, their patients’ and colleagues’ ethnic, culture, age, gender, and disabilities.
• Comply with all HIPAA, other regulatory, and hospital guidelines for privacy, safety, and patient care
• Demonstrate competence, reliability and professionalism in daily service-related responsibilities including reliability, prompt case completion and responding to clinicians
• Exhibit a professional demeanor in terms of appearance, conduct, attitude, and communication
• Maintains the ACGME log site entering all FNAs performed to demonstrate compliance with suggested number of at least 30 over training period
• Demonstrate the ability to present research findings at a scientific meeting

In addition to the excellent and wide range of clinical material available, the division of cytopathology has a wealth of teaching materials available for the training fellows and residents within the division and the department. Within the department there are greater than 100 texts and reference books. There are 5000 cases in study sets encompassing all organ systems and cytology specimen types. Recently the complete CD-ROM set from the Harvard Cytopathology Course and a CD from the USCAP Diagnostic Cytopathology course were purchased and are available for fellow learning. The department pays for the fellows to participate in the Progressive Evaluation of Competency program (PEC), offered by the American Society of Cytopathology (ASC). PEC is designed to track fellows’ progress through the year and overall competency in Cytopathology. In addition there are 3-5 educational teleconferences that are offered each year.

**CURRICULUM**

There is no formal curriculum, but there is ample education material, the opportunity to obtain form clinical research training, educational conferences and formative evaluation as delineated below.
Apprenticeship model of education
Cytopathology training is an apprenticeship. Fellows build their careers by working closely with the pathology faculty together in building the six (6) core competencies, developing technical and diagnostic skills, application of technology and ancillary testing, and appraising the literature, assimilating evidence from scientific studies, among other things.

Faculty sign out cases side by side (through a multiheaded microscope) with the fellows at least once every day all year long. Fellows train with a member of the faculty in this fashion at least 2.5-3 hours every day. Fellows train with faculty 30 minutes to 1 hour per procedure daily during the FNA procedures. The number of procedures varies daily and range from 1 or 2 to as many as 5 or more faculty assisted encounters. Fellows interact with additional approximately 30 minutes daily on average faculty for quality assurance, second opinions or preliminary screening to determine if ancillary studies will be needed. Faculty spend another 2 hours weekly preparing fellows for multidisciplinary conferences and another 5 hours altogether per week attending these conferences.

Core Educational Activities
Program objectives will be accomplished by participating in the following rotations, conferences and professional development research projects. ACGME competency-based goals and objectives for each rotation have been outlined before.

Program Core Rotations: 12 months combined
The fellow follows a structured daily schedule that provides a systematic approach to learning cytopathology.

I. Fine Needle Aspiration Cytology:
   A. Kansas University Hospital
   B. KU MedWest
   C. Kansas University Hospital Cancer Center

II. Exfoliative Cytology:
   A. Gynecologic Cytology
   B. Non-gynecologic Cytology

Clinical teaching activities
- Daily Cytopathology sign-out with cytology-histology review
- Direct supervision by faculty on fine needle aspirations
• Weekly conference preparation with faculty
**Fine needle aspiration rotation**

Week 1: Learn various techniques including cytopreparation technique, smearing, needle aspiration, and touch preparation. Accompany pathologists when performing FNAs and assisting radiologists. Sign-out with attending pathologists. Complete reading assignments.

Week 2: Same as week 1 with initial hands-on practice, including performing FNAs of palpable masses and touch preparation of core biopsies; responsibilities in slide preparation.

Weeks 3 and 4: Same as week 2 with increased responsibilities: emphasis on performing FNAs of palpable masses, evaluation of adequacy, and on-site interpretation; introduction to sonographic-guided aspiration biopsy of head and neck.

Continuous: Throughout the rotation the resident participates in multidisciplinary conferences (Breast, ENT, Thyroid).

**Research**

Fellows are expected to engage in research and ongoing self-study and improvement by taking advantage of the approximate three months of research and by reviewing the extensive study sets available. Fellow self-study will be enhanced by required participation in medical student, resident, and interdisciplinary teaching, as well as in the active building and enhancement of the clinical study set materials.

**Fellows as consultants**

Fellows have many opportunities to serve as consultants:

- Fellows serve as the “first line” consultants on all cytology cases.
- Fellows advise clinicians and resident trainees on submission of cytologic specimens and are primarily responsible for confirming specimen adequacy of both superficial and deep fine needle aspirations performed by radiologists, other clinicians and pathologists themselves. Patient clinical history and clinical suspicions are discussed in conjunction with cytology findings and pathologic differential diagnoses and clinical plans. The fellow, with faculty backup, discusses diagnoses with the clinicians.
- Fellows teach and sign out with residents and medical students
- Fellows review fellow-cytotechnologist discrepancies.

**Fellows as consultants**

Fellows have many opportunities to serve as consultants:

- Fellows serve as the “first line” consultants on all cytology cases.
• Fellows advise clinicians and resident trainees on submission of cytologic specimens and are primarily responsible for confirming specimen adequacy of both superficial and deep fine needle aspirations performed by radiologists, other clinicians and pathologists themselves. Patient clinical history and clinical suspicions are discussed in conjunction with cytology findings and pathologic differential diagnoses and clinical plans. The fellow, with faculty backup, discusses diagnoses with the clinicians.
• Fellows teach and sign out with residents and medical students
• Fellows review fellow-cytotechnologist discrepancies.

Continuous improvement
To learn and eventually practice the best Cytopathology, continuous cytology and histology correlation is necessary. Exposure to some surgical pathology is necessary to maintain essential diagnostic skills.
Fellows participate in Surgical Pathology as described below:
• Review and work-up of surgical pathology outside consultation cases on certain rotation as Fellow/Junior Attending.
• Encouraged to review frozen and permanent sections for cases for which they performed prior FNAs.

Graded responsibilities
During the first month supervision is direct and very close, with the faculty member being present throughout procedures. In the next 2 to 3 months, depending on the skill level of the fellow supervision of an FNA procedure, for example is more indirect, with faculty available and physically present for the key elements of the procedure. Towards the end of training, fellows are expected to function on the level of a Junior attending with increased independence and self directed learning.
### PROGRAM CORE CONFERENCES

<table>
<thead>
<tr>
<th>Name of Conference</th>
<th>Frequency</th>
<th>Responsible Department</th>
<th>Required? (Yes/No)</th>
<th>Attendance Taken? (Yes/No)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP Core</td>
<td>Wkly</td>
<td>Pathology</td>
<td>Cytology lectures only</td>
<td>Yes</td>
</tr>
<tr>
<td>Division Mgmt Meeting</td>
<td>Mthly</td>
<td>Cytopathology</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Multidisciplinary ENT Tumor Board</td>
<td>Wkly</td>
<td>ENT</td>
<td>Yes*</td>
<td>Yes</td>
</tr>
<tr>
<td>Multidisciplinary Thyroid Tumor Board</td>
<td>Mthly</td>
<td>ENT</td>
<td>Yes*</td>
<td>Yes</td>
</tr>
<tr>
<td>Organ specific slides</td>
<td>Mthly</td>
<td>Pathology</td>
<td>Yes*</td>
<td>No</td>
</tr>
<tr>
<td>Grand Rounds</td>
<td>Mthly</td>
<td>Pathology</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>GSMC 803 – Intro Clin. Research</td>
<td>Mthly for semester</td>
<td>General and Clinical Research Center</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Journal Club</td>
<td>Mthly</td>
<td>Pathology</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Multidisciplinary Breast Tumor Board</td>
<td>3x/mth</td>
<td>Hematology/Oncology</td>
<td>Yes*</td>
<td>Yes</td>
</tr>
<tr>
<td>Cytology Unknown</td>
<td>Mthly</td>
<td>Cytopathology</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Quality Improvement</td>
<td>Mthly</td>
<td>Pathology</td>
<td>Cytology reviews only</td>
<td>Yes</td>
</tr>
<tr>
<td>Multidisciplinary Clinical Pathologic Correlation</td>
<td>Weekly</td>
<td>Internal Medicine</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Participation in the multidisciplinary patient management conferences are settings in which interdisciplinary clinical quality improvement and patient safety are taught and learned.

**Additional Learning opportunities**
- Attendance and presentation of research projects at national conferences
- Participation in Annual Resident Research Day
- Quarterly review of CAP cytology education program slides
- ASCP Cytoteleconferences
- Review and study cases sent for consultation
- KUMC and QUEST study sets

**Professional Development Research Projects**
- Quality Assurance Project
- Clinical or Basic Science Research Project

**EDUCATIONAL RESOURCES**
Approximately 11,000 patient cases are evaluated each year in our hospital-based laboratory, of which more than 4,000 are nongynecologic specimens. FNAs comprise approximately one-third of the nongynecologic specimens. Particularly strong interdepartmental programs exist in cancer prevention and control, epidemiology and biostatistics; and fellows have the opportunity to evaluate research FNA material in addition to diagnostic cases.

Emphasis is placed in the utilization of cytopathology as a diagnostic modality applicable to neoplastic and non-neoplastic diseases and in the study of cytologic samples by a variety of techniques including liquid based thin layer preparation; light microscopy, electron microscopy, immunocytochemistry, cytogenetics, flow cytometry, and molecular diagnostics. Fellows are encouraged to design and complete a research project. Participation in conferences and teaching of pathology residents, medical students and cytotechnology students is required as another educational tool and to teach leadership skills.

Fellows have access to authoritative texts, journals, study sets, and innumerable online resources for use throughout their training, including clinical reference tools such as AccessMedicine through the Dykes Library ([http://library.kumc.edu/clinicalreference.html](http://library.kumc.edu/clinicalreference.html)).

**Other Resources**
Office space and computers
Fellows have access to computers in their own offices and the sign-out area that provide access to the Internet, word processing, power point presentation, and database/spreadsheet building.
• Research subjects
• Study organization and management/Forms
• Measures/Instruments
• Outcomes, covariates, sample size, analytic plans
• Critically Appraising Research-A Consumer’s Perspective
• Grantsmanship / RI Funding
• Writing a Clinical Research Paper and Submitting to a Journal
• Effective Data Presentation: Platforms and Posters
• From Bench to Bedside
• Putting it all together: How I got my research off the ground at KUMC
• Conduct of First-IN-Man Trials

Fellows are also encouraged to present their research at the annual Residents, Postdocs and Fellows Research Day.

Research resources http://www.kumc.edu/som/facdev/researchresources.html
research that will eliminate the existing disparities in health status, and it prepares students, residents, fellows and faculty for leadership roles.

OCED offers educational, academic support and professional development resources to support and an infrastructure that connects with students, residents, fellows and faculty from diverse, under-represented, under-served or otherwise disadvantaged backgrounds. OCED oversees a number of educational “pipeline” programs designed to increase the number of persons from underrepresented populations in medicine—from “K to Gray. OCED sponsors national speakers in diversity and cultural competency, professional development and supports health disparities research. OCED has developed a number of diversity resources that are available to students, residents, fellows, faculty and community, such as the Center of Excellence for Diversity and the Elimination of Health Disparities (COE) and the Minority Information Resource Center (MIRC) which can be found, among others at: http://library.kumc.edu/diversity.html.

Web-Based Education
KUMC has been a national leader in web-based education. Not only have we developed many courses that are either web-enhanced or entirely offered on-line, but also we have initiated several degree programs on-line.

Electronic resources
A. Resources for Exfoliative Cytopathology

- American Society of Cytopathology website http://www.cytopathology.org

B. Resources for Fine Needle Aspiration Cytology

- American Society of Cytopathology website http://www.cytopathology.org
- Educational videos from the DVD by Britt-Marie Ljung, M.D. from UCSF: Fellow watches these videos to learn optimal FNA techniques www.papsociety.org
- Video article: Preparation and Using Phantom Lesions to Practice Fine Needle Aspiration Biopsies by Vinod B. Shidham, George M. Varsegi, Krista D’Amore, Anjani Shidham, Department of Pathology, University of Wisconsin –
C. Institutional resources

- Graduate Medical Education: [http://gme.kumc.edu/](http://gme.kumc.edu/)
- Pathology and Laboratory Medicine Residents training manual: [http://www2.kumc.edu/pathology/residents.html](http://www2.kumc.edu/pathology/residents.html)
- KUMC Information Resources: Online Clinical Resources [http://library.kumc.edu/clinicalreference.html](http://library.kumc.edu/clinicalreference.html)
- KUMC Chalk online training modules (go to myKUMC log on)
- Information for Faculty and Staff [http://www.kumc.edu/faculty.html](http://www.kumc.edu/faculty.html)
- Hospital: [https://access.kumed.com/vpn/index.html](https://access.kumed.com/vpn/index.html)

**Recommended Reading**

(Current editions or their equivalent)

1. Koss (ed), *Diagnostic Cytopathology and It's Histopathologic Basis*. Lippincott, Williams and Wilkins, 2005
Westwood Campus
The Westwood campus is another satellite campus. It is located approximately 1 mile from the main campus, where the Richard and Annette Block Cancer Care Pavilion is located. This 42,000 square foot center is about a 5 minute drive from the main campus. Shuttle service is also available. A variety of diagnostic and outpatient procedures are offered on this campus including imaging, laboratory services, plastic surgery and internal medicine. Fellows perform FNAs occasionally perform FNAs on this campus as a part of their FNA rotation. The Multispecialty Breast Tumor Board conference is located on this site.

In addition to the excellent and wide range of clinical material available, the division of cytopathology has a wealth of teaching materials available for the training fellows and residents within the division and the department. Within the department there are greater than 100 texts and reference books. There are 5000 cases in study sets encompassing all organ systems and cytology specimen types. Recently the complete CD-ROM set from the Harvard Cytopathology Course and a CD from the USCAP Diagnostic Cytopathology course were purchased and are available for fellow learning.

Duty Hours
The program adheres to institutional GME requirements for duty hours and call policies. Please refer to the online Graduate Medical Education Policy and Procedure Manual @ http://www.kumc.edu/som/gme/gmepolicyandproceduremanual.pdf.

Briefly, duty hours are defined as all clinical and academic activities related to the program; i.e., patient care (both inpatient and outpatient), administrative duties relative to patient care, the provision for transfer of patient care; time spent in-house during call activities, and scheduled activities, such as conferences. Duty hours do not include reading and preparation time spent away from the duty site.

Training occurs within the context of the 80 hours per week, maximum duty period length and one day off in seven standards. Fellows work a maximum of 80 hours averaged over a four-week period, inclusive of all in-house call activities. Fellows must be provided with one day in seven free from all educational and clinical responsibilities, averaged over a four-week period, inclusive of call. Adequate time for rest and personal activities must be provided. This should ideally consist of a 10-hour time period provided between all daily duty periods; 8 hours between duty periods is required.

Fellows are in their final year of training and may stay on duty or return to the hospital to perform fine needle aspirations or immediate evaluation of cytology specimens.
At-home call (or pager call): The frequency of at-home call is not subject to the 8 hours between duty periods rule. However at-home call must not be so frequent as to preclude rest and reasonable personal time for each resident.

Monitoring of duty hours
Duty hours are monitored electronically through the E-Value system, which is an institution-wide system managed by the Graduate Medical Education office to ensure compliance. The program coordinator reviews fellow hours on a weekly basis. If irregularities occur, this information is immediately reported to the program director. The Cytopathology Program has never had a violation of duty hours.

Violation of duty hours
A violation of duty hours would be reported to and addressed immediately by the program director. The program director would determine why the violation occurred and would take steps to ensure no future violations would occur.

On call duty
Fellows are on call for preparation and immediate evaluation of stat cytology every 3rd week of the month. All call is supervised by faculty members. Fellows are given increased responsibility which will include more time on each procedure or task being indirectly supervised (immediate availability) by the faculty member. Cytopathology fellows are in their final years of training. Cytopathology fellows do not have overnight call or “night float”.

Handoff Protocol
Transfer of Care
To provide safe and effective patient care in pathology, transitions of care (anatomic and clinical pathology specimens/cases) will use effective and structured hand-off procedures including the following:

End of Month Handoff
Departing and arriving fellow MUST meet face to face to discuss incomplete cases and what each case needs to be signed out. The status of each incomplete case MUST be indicated on the paperwork for the case (ex awaiting immunohistochemistry or special stains, needs Q/A, history etc). All incomplete cases MUST have available clinical history, corrected procedure notes (for FNA), topography, and preliminary diagnosis entered as much as HUMANLY possible.
• The departing fellows are to make themselves available for questions as needed during the first week of the next month.

For on call fellow, if called in during the night or on the weekend
• Write the details regarding the call (e.g. patient information, physician information, results) on the paperwork. The will always be direct or indirect supervision by faculty.

For on call fellow, if the fellow receives a phone call not requiring coming in:
• Communicate this information in person or by email (prior to 8:30 am) with the call details to the pertinent fellow and attending. There will always be direct or indirect supervision by faculty.

POLICIES AND PROCEDURES

Fellows are expected to become familiar with the General Policies and Procedures listed in The Department of Pathology and Laboratory Medicine Resident Manual, as well as the Graduate Medical Education Policy and Procedure Manual (http://gme.kumc.edu/policiesandprocedures.html).

The Graduate Medical Education Policies and Procedures manual represents the institutional guidelines, policies and procedures governing the residents at the University of Kansas School of Medicine and Medical Center. Should material conflict between the institutional policies outlined in the Graduate Medical Education Policies and Procedures manual and those adopted by a program, i.e. the Department of Pathology and Laboratory Medicine Resident’s Manual, the Graduate Medical Education Policies and Procedures manual will take precedence.

Work Environment
The program will maintain an environment that is conducive to the health and well-being of the fellows. We will provide fellows with an educational and work environment in which fellows may raise and resolve issues without fear of intimidation or retaliation
Fellow qualifications
Candidates must be Board eligible or certified in anatomic pathology or anatomic and clinical pathology and must have or be eligible for an unrestricted license to practice medicine in Kansas.

Recruitment and selection
The Fellowship Training Program in Cytopathology is listed in the Directory of Pathology Training Programs published by the Intersociety Committee on Pathology Information, Inc. as well as on the institutional website. The program selects fellows from among eligible candidates on the basis of program related criteria such as their preparedness, ability, aptitude, academic credentials, communication skills and personal qualities such as motivation and integrity.

Nondiscrimination
The Cytopathology program will not discriminate with regard to sex, race, age, religion, color, national origin, disability, or any other applicable legally protected status as required by the ACGME.

Moonlighting
Departmental residents working for pay on their off hours at institutions or physicians’ offices outside of KUMC.

1. All moonlighting must be approved, prior to the onset, by the Chair of the Department, Program Director and the Executive Dean of the School of Medicine.
2. The description of the moonlighting functions must be on record in the office of the Chair of the Department.
3. The practice must, in no way, compromise the educational time or function of the resident in the program of the Department. It must be during “off” hours. If the resident’s performance is compromised, the Program Director and/or Department Chair can suspend the resident’s moonlighting privileges. (Graduate Medical Education Policy and Procedure Manual)
4. The KUMC has no malpractice liability responsibility for activities covered under this section. Therefore, it is mandatory that the resident maintain personal malpractice coverage, at a level no less than that provided by the State of Kansas for activities related to our resident program. The carrier and policy number must be recorded on the approval form.
5. The fellow must have a permanent license to practice medicine in the state in which the moonlighting is to take place.
**Locum tenens**
Fellows working for pay at another institution or office covering for a practicing pathologist in that pathologist’s absence from the site of practice on a temporary basis.

1. All *locum tenens* arrangements must be approved, prior to the onset, by the Chair of the Department, Executive Dean of the School of Medicine, and Executive Vice Chancellor. This approval must be obtained on a special form available from the Program Director or Chair.
2. A description of the functions must be on record in the office of the Chair of the Department.
3. *Locum tenens* are generally restricted to the practice of pathology and are undertaken by a senior resident considered by the staff to be nearly ready to practice pathology.
4. The number of days allowable is limited to a total of two weeks for any one resident for any one year.
5. The *locum tenens* must not, in any way, deduct from required rotational time of the resident in obtaining time necessary for eligibility for the AP/CP boards of the American Board of Pathology.
6. The resident must have a permanent license to practice within the State of the *locum tenens*.
7. Professional liability insurance, for *locum tenens* within the State of Kansas is available under KSA 40-3401 et. seq. if the *locum tenens* is approved by the Executive Dean and the EVC. Any *locum tenens* arrangement not falling under this statute must be accompanied by adequate, personal, professional liability insurance coverage.

**Educational rotations outside of KUMC**
Fellows involved in either elective, or required (other than KCVAH) rotations outside of KUMC, not for pay.

1. These rotations are primarily for educational purposes, and the fellow receives no financial remuneration for this experience.
2. All such rotations must be approved, prior to their onset, by the Chair of the Department and the Program Director, the Executive Dean, the EVC, and the associate general counsel. Approval must be obtained using a special form available from the Program Director or Chair. This form must be submitted a minimum of three (3) months in advance.
3. A description of this experience must be on record in the residency program curriculum book in the Office of the Chair.
4. Such programs, whether elective or required, should be beneficial to the education of the specific resident who requests the program.

5. Terms of agreement include designation of the outside facility (university, hospital, etc.), effective period of the rotation, fiscal considerations, licensure, malpractice coverage, supervision and evaluation of the fellow’s performance.

6. Fiscal considerations. Because of the loss of Medicare pass-through funding due to the absence of the fellow from our program, the contractual arrangement, especially for Kansas and local hospitals, should include reimbursement to KUMC by the facility to the extent of 1.5 X the stipend plus fringe for each week or month period of the rotation. Under unusual circumstances, in certain facilities not able to receive Medicare pass-through funds and when the educational opportunity is unique and limited, this pass-through reimbursement may be waived. These financial arrangements must be cleared by the Executive Dean.

7. Licensure. The state and license number must be placed upon the application.

8. Malpractice. Professional liability insurance coverage is provided by the University’s self-insurance program.

9. Supervision and evaluation. The fellow must provide evidence that he/she will be fully supervised on this education experience, that the supervising staff agrees to be responsible for the supervision of the fellow in all patient care, and that an evaluation of the resident’s performance be forwarded to the Chair of the Department upon completion of the rotation.

Vacations
Each fellow is entitled to a fifteen days of vacation annually. The vacation period is to be scheduled through the Program Director, faculty for that month and other fellow(s) and must be acceptable to the resident’s scheduled service. This vacation must be used in the fiscal year (July thru June) in which it is earned. Because of the many problems relating to the influx of new residents and termination of training of old residents on or around July 1, the following vacation policy pertains: In general, no vacation will be permitted for any resident from June 15 to July 15. When leaving town for any reason, whether on scheduled vacation or holiday or to attend a meeting, leave your complete temporary address in the departmental office and notify the Program Director, faculty of that month and other fellow(s) of any necessary or anticipated change in call schedule. This requirement is largely for your benefit so that in the event of personal emergency you can be reached.

Allotted time off during monthly rotations – Only one week per month may be taken off (vacation, sick leave, coverage for another resident, or other) on any given rotation.
Additional time off will have to be made up during elective time. Until the excess time off has been made up, the resident will not receive credit for that rotation.

Scheduling of vacation is restricted to certain rotations. Vacation times are scheduled by mutual agreement between the fellows. It is encouraged that fellows coordinate scheduling with the main program Chief resident prior to the start of the academic year. Any changes in the vacation schedule after the start of the year must be approved by the Program Director.

**Reporting of Absences**
Unscheduled absences must be reported to Fellowship Coordinator as early as possible on the day of absence. The resident must also contact the service to which they are assigned.

**Fatigue**
All new residents must complete the Fatigue Training Module in Angel during the institutional orientation. All faculty members are also educated (by taking the Angel Module) to recognize the signs of fatigue and sleep deprivation and must adopt and apply policies to prevent and counteract its potential negative effects on patient care and learning. A “swing” call room (Room 2901 Heart hospital) and/or travel vouchers are available for fellows who might experience fatigue.

**Personal problems**
There are a variety of resources available for fell stress, including mental or emotional conditions inhibiting performance or learning. These are:

- **The Department of Psychiatry**
  A full range of inpatient, outpatient, and emergency services are offered for the diagnosis and treatment of personal problems, including chemical dependency. The department is professionally staffed by psychiatrists, psychologists, and social workers and appointments may be made through the Psychiatry Clinic or individually through the private practices of these faculty members.

- **Kansas State Medical Advocacy Program**
  A Kansas medical license may be revoked, suspended or limited if a health care provider becomes unable to practice with reasonable skill and safety due to physical or mental disabilities, including deterioration through the aging process, loss of motor skills or abuse of drugs or alcohol.
Kansas law does provide a Medical Advocacy Program which providers can contact in lieu of contacting the Kansas State Board of Healing Arts. The goal of the Medical Advocacy Program of the Kansas Medical Society is to confidentially rehabilitate and support the provider whenever possible. Under the Impaired Practice provisions of the program, confidential assistance is offered to residents who suffer from chemical dependency or other forms of impairment.

Also available to fellows is the counseling and educational support center which offers the following:

- Training Exam coaching
- USMLE Step 3 Preparation
- Specialty Board Exam Assistance
- Educational and Performance Excellence Coaching
- Manage Stress/Time
- Residency Demands
- Personal Life Demands
- Relationships / Marital / Family Concerns
- Personal Counseling
- Psychiatric Counseling
- Consultation and Referrals
- Crisis Intervention
- Lending Library- in training and board exams

These facilities are staffed by professional-level or practicum counselors. All services are provided in the strictest of confidence.

**State of Kansas HealthQuest**

An additional source of assistance for residents needing confidential counseling, medical, and psychological support services is the State of Kansas HealthQuest, 24-hour, toll-free assistance line; if referred through the HealthQuest, the first counseling session is paid by the State. All contacts are kept in strict confidence.

Residents may also contact or be referred to off-campus resources as appropriate.
Grievance Procedure
Should a fellow have a grievance or be dissatisfied with any aspect of the program, he/she is encouraged to initially discuss the issue with his/her attending. If the results are felt by the fellow to be inappropriate or the issue is not satisfactorily resolved, the fellow should bring the issue to the program director for discussion. If the fellow continues to feel that the issue or issues have not been adequately addressed, he/she should approach the department chair. If resolution cannot be attained the fellow may present the grievance in writing directly the Office of Graduate Medical Education as per GME policy.

Miscellaneous Policies
Medical Student Teaching Responsibilities Fellows participate in the teaching program as junior instructors. You will be involved with teaching residents and medical student histopathology labs. This is a valuable part of your experience. Your teaching responsibilities may also include substituting for senior staff in small group problem-based learning sessions. Occasionally, a fellow may be asked to give a lecture, if they have developed a special area of expertise, or express a desire to lecture.

Pagers
The Department will provide a pager for each fellow. If the pager is lost or damaged, the resident is responsible for the cost of the replacement.

Procedures and Logbooks
The ACGME requires Pathology residents to list the following procedures on the ACGME web-based logbook: autopsies, bone marrow aspirates/biopsies and fine needle aspirates. It is the responsibility of each resident to maintain updated ACGME logs.

Hospital and Departmental Services
Consult the main program Chief Residents or Fellowship Coordinator regarding uniforms, laundry, and necessary keys. Keys, protocols, slides, sections, and blocks must be obtained from and returned to the appropriate departmental offices. Assignment of individual offices, microscopes, and other equipment will be made by through Program Director. Outgoing long distance telephone calls concerning official business are to be made with the Division Director’s or departmental chair’s consent and are to be placed on record with a departmental secretary. Non-work related phone calls are allowed during work hours only if they do not interfere with the resident’s work and are not disruptive to people within the work area.

Full day attendance for off-site rotations (KU MedWest) is required on day per week.
Conferences
Fellows are required to attend cytopathology lectures in the Department’s Anatomic Pathology core curriculum, cytology unknown slides conferences, cytology division management meetings, and the cytogenetics and molecular diagnostics lectures in the Department’s Clinical Pathology core curriculum. Fellows are also encouraged to attend the surgical pathology morning conference and residents’ AP/CP case presentations. Conference attendance will be recorded by the Chief Residents and the cytology laboratory supervisor respectively and reviewed on a quarterly basis by the program director. Failure to achieve the required attendance level (75%) will result in disciplinary action. Fellows are expected to attend monthly departmental quality improvement conferences, especially if cytology is being discussed. Participation in the multidisciplinary patient management conferences are settings in which interdisciplicinary clinical quality improved and patient safety are taught.

All other policies including appointment of residents, resident agreements, resident standing, and program completion, remediation and probation, dismissals, appeal and fair hearing, , other forms of severance of the resident agreement, policy on prevention of illegal drug and alcohol use, personal leave (including maternity leave), and leave of absence, professional liability and risk management policies and procedures, policy on resident stipends and supplements, equal opportunity and harassment policies, policies related to loan deferment and financial counseling, policies regarding residents with disabilities, physical examination, immunization and post-exposure prophylaxis policies, policies relating to DEA registration, policy on resident transfers, and policies regarding overseas travel are all located within the GRADUATE MEDICAL EDUCATION POLICY AND PROCEDURE MANUAL (GME Manual) that is distributed to each resident during orientation. The GME manual is also located online at http://gme.kumc.edu/

Please Note: The Graduate Medical Education Policies and Procedures manual represents the institutional guidelines, policies and procedures governing the residents at the University of Kansas School of Medicine and Medical Center. Should material conflict between the institutional policies outlined in the Graduate Medical Education Policies and Procedures manual and those adopted by a program, i.e. the Department of Pathology and Laboratory Medicine Resident Manual, the Graduate Medical Education Policies and Procedures Manual will take precedence.
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Cytology turnaround time policy
We expect over 80% of all of our specimens to meet the following expected parameters. All times, days and hours, are working days from delivery of the specimen.

- Uncomplicated non-gynecologic specimens will be completed within 24 hours from delivery to the laboratory.
- Complicated non-gynecologic specimens will be completed within 48 hours.
- Fine needle aspirations should have a preliminary report within 2 hours and will be signed out the same day unless special stains, immunohistochemistry or review of the biopsy or previous material is required. In that case they will be done within 24 hours and a report will be discussed with the clinician and documented in the chart.
- Gynecologic cases will be screened within one week of receipt and reviewed by the cytotechnologist and two days after transmittal to the pathologist. The entire report will be finalized within 10 days total.
APPENDIX I

ABOUT KANSAS CITY

The greater Kansas City metropolitan area combines many municipalities on both sides of the Kansas and Missouri state line, encompasses five counties, and has a combined population of 1.9 million people. There is something for everyone in Kansas City. The following is a brief overview of just what this wonderful metropolitan area has to offer.

For the sports enthusiast, KC is home to many professional sports teams - the Wizards (Soccer), the Royals (Baseball), and the Chiefs (football). Kansas City is only 40 miles away from Lawrence, Kansas and the 2008 National Championship KU basketball team and the 2008 Championship Orange Bowl team. The newly established Tour of Missouri International Cycling Race takes place the first week of September, and the Kansas Speedway was completed in 2002 for the NASCAR enthusiast.

Kansas City has many places to explore: the Truman Presidential Library in Independence, Missouri; Liberty Memorial, which houses the National WWI Memorial
and Museum; the Negro Leagues Baseball Museum; and the Toy and Miniature Museum. The area is rich with historical sites and architecture: Union Station; the Alexander Majors House, which was the starting point for the Pony Express; the Shawnee Indian Mission in Fairway; and the Country Club Plaza, which was the country’s first outdoor shopping mall, established in 1920. The area has many hiking and bicycle paths, and the Kansas City Zoo is open all year.

The cultural and performing arts are in full bloom in KC with outdoor theaters like the Starlight Theater in Swope Park and the Shakespeare festival held every summer in Southmoreland Park. When it is completed in 2009, the Kauffman Center for Performing Arts will host national touring companies and will house multiple performance halls, the Kansas City Ballet, the Kansas City Symphony and the Missouri Repertory Theater. The Crossroads District is home to “First Fridays,” which have become a tradition for tours of the local art galleries and studios in the area.

The 18th and Vine Historic Jazz District is the birthplace of Kansas City jazz and an urban destination for family or friends looking for the sophisticated mix of great dining, live music and two of the best museums in the country. Or you can experience Downtown Kansas City with the Kansas City Power and Light District. The $850 million entertainment district is an entertainment, retail and dining hot spot for visitors and conventioneers. It transforms itself from a unique lunch and retail destination by day to an exciting dining and entertainment experience in the evening.

The Nelson-Atkins Art Museum is continually ranked as one of the nation’s top art museums. It is known for its excellent private collection, which includes everything from Impressionist paintings to a significant display of Indian and Asian antiquities. The Kemper Museum of Contemporary Art is just a block away from the Nelson, and has an impressive collection of contemporary American art. Adjacent to both art museums is the Kansas City Art Institute, where many well-known artists (including Walt Disney) were educated. Kansas City is an area of many cultural traditions and festivals.

The metropolitan area hosts the country’s third largest St. Patrick’s Day parade (behind Chicago and Boston); Croatian community festivals in Strawberry Hill, Scottish Highland games every June; multiple Greek festivals throughout the summer, and Spinach Festival every September in Lenexa. Every fall, the American Royal Livestock, Horse and Rodeo Show kicks off with a parade and the world famous American Royal Barbecue. Despite Kansas City’s reputation as the barbecue capital of the world, plenty of healthful eating is available through the numerous farmers’ markets in the metropolitan area.
Education is also a focal point of our community, with highly rated public library systems on both sides of the state line and strong educational systems. Kansas has some of the best public and private schools for primary and secondary education. The metropolitan area is home to multiple universities and community colleges. Johnson County Community College is continually ranked first in the country for its programs and services.

Information about Kansas City adapted from Otolaryngology-Head and Neck Surgery Residency Program manual [http://www2.kumc.edu/otolaryngology/resid.htm](http://www2.kumc.edu/otolaryngology/resid.htm)
2. Double click “Case Diagnostic Reports”

3. Double click “Nat Lang II Search No Race”. It is the only option that shows up.
4. Now you will see a screen that looks like this.
5. For our sample search, I’ve arbitrarily decided that we want to find all cases of gastrointestinal leiomyomas in the past year. So, for accession date and sign out date, we will choose 1/01/2010 as the starting date, and 12/31/2010 as the end date. Just choose “User-selected date” for each date and type in the date you want, like so:
6. Now we will choose the specimen class. We are doing this for Dr. Al-Kasspooles, who is only interested in KU surgeries and not outside cases or autopsy cases, so we will choose “surgical routine.” By not choosing “all” you will also make the search go faster. Select surgical routine by clicking “individual items,” then scrolling down to “surgical routine” and clicking “add”: 
7. Now we continue to “text search”, the most important and variable part of the search. Obviously we will want to search for “leiomyoma” in the final diagnosis line, which we can set up easily enough, like so:
a. However, this will give us an obnoxious amount of uterine tumors that we are not interested in to sift through. To make our search more specific, we can have the case exclude words that are likely to be associated with uterine leiomyomata, such as “hysterectomy.” The odds of seeing the word “hysterectomy” in the final diagnosis line of a GI leiomyoma are slim to none, so we won’t lose any sensitivity by doing this.

b. Note: pay careful attention to the “ANY/ALL” buttons – if you are looking to search for “invasive ductal carcinoma”, for example, you must make sure you have selected “ALL”. “ANY” will return every case that has “invasive” plus every case that has “ductal” plus every case that has “carcinoma” – which means your search will never end, never ever, until you force quit CoPath. In our example, we only have 1 search criterion for each box so we are not worried about this.
c. Note also that by choosing the “And/Or” button you can set up complex logic statements to further refine your search.

8. Now we will move down to “text type to print.” The more things we select, the longer and more obnoxious our report will be to read. However, if you need to glean certain information from the gross, for example, having the gross description print out can save you the trouble of having to go back in to CoPath
and look at each one of those cases individually. In our example, we will choose “Final Diagnosis” only.
9. The last three options, “age”, “gender”, and “part type”, are things that I rarely use in these searches. Gender can be useful if you want to reduce the search time for a search on prostate cancers, for example, or cervical cancer. For our example, we will leave these unmodified. So, now we are done and ready to see our search results. Click “OK”.

10. This step may take some time.
11. As you can see, we got 31 cases in our search results. Looking at the first case that comes up, we see that at least one of these is still a female gyn case – doh! (In fact, most of them are.) This often happens, and you have to adjust your search criteria accordingly – for example, going back to exclude ANY of the following: “salpingo-oophorectomy”, “myomectomy”, “uterine” as well would make the search more specific. No big deal – just start relatively broad and then narrow it according to what you’re seeing – this is better than being too specific and missing cases that you would include in your study. To go back and modify your original criteria – DON’T close out your search – just choose “select criteria”.
12. When you have the criteria fine-tuned, click print.
APPENDIX III
Optional Reading List (current editions or their equivalents):

Books:


10. Journals:

- Cancer Cytopathology
- Diagnostic Cytopathology
- American Journal of Surgical Pathology
- Modern Pathology
- Human Pathology
- Archives of Pathology and Laboratory Medicine
## Core Competency Teaching and Assessment Matrix Template

<table>
<thead>
<tr>
<th>Core Competency</th>
<th>TEACHING METHODS</th>
<th>EVALUATION METHODS</th>
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<tr>
<td></td>
<td>Didactic lecture</td>
<td>Record Review</td>
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<td>Group discussion</td>
<td>Chart Stimulated Recall</td>
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<td>Objective Structured Ex.</td>
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<td>Vanderbilt Matrix</td>
<td>Clinical Exams.</td>
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<td>Simulations &amp; Models</td>
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<td>SYSTEMS-BASED PRACTICE</td>
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<td>360° MultiSource Rating Assessments</td>
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<td>Written Examination</td>
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<td>Oral.</td>
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<tr>
<td>OTHER</td>
<td>Procedures or Case Logs</td>
<td>Patient Survey</td>
</tr>
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### PRACTICE-BASED LEARNING & IMPROVEMENT

- Analyze own practice for needed improvements
- Use of evidence from scientific studies
- Application of research & statistical methods
- Use of information technology
- Facilitate learning of others

### INTERPERSONAL & COMMUNICATION SKILLS

- Creation of therapeutic relationship with patients
- Listening skills

### PROFESSIONALISM

- Respectful, altruistic
- Ethically sound practice
- Sensitive to cultural, age, gender, disability issues

### SYSTEMS-BASED PRACTICE

- Understand interaction of their practices with the larger system
- Knowledge of practice and delivery systems
- Practice cost-effective care
- Advocate for patients within the health system

### APPENDIX IV
APPENDIX V

Laboratory Management Study Guide

What is CLIA ‘88?

What is the difference between accreditation and regulation?

What are some regulatory agencies?

What is the Five-Year Look-Back?

What is a satisfactory Pap smear? Unsatisfactory?

With liquid based preparation what constitutes adequacy based on cellularity?

What is the most common cause of malignant pleural effusions in men? Women?

If delay in transportation to the laboratory is unavoidable what should be done with the specimen?

What is the likelihood of needing a chest tube after lung fine needle aspiration?

What percentage of cells should be macrophages in a BAL specimen?

How many milliliters per aliquot of fluid are used to sample subsegmental sections of lung by BAL?

Pulmonary microvascular cytology is used to evaluate what?

What is the normal maximum amount of fluid in the pleural space?

What nuclear and cytoplasmic stains are used in the Papanicolaou stain?

How often should the quality of staining be monitored and documented?

What are some of the procedures that help avoid cross contamination between specimens?
What are the CLIA ‘88 slide screening limits for cytotechnologists per hour in any given 24 hour period? When slides are prepared from liquid based preparations? When automated screening is employed?

Is there ever a slide limit for pathologists?

How often should the technical supervisor review slide limits and re-assess using lab defined performance standards?

New cytotechnologists have to be monitored for what period of time before they can screen unsupervised?

What corrective actions should you take when you think that a cytotechnologist is not performing adequately?

Who is responsible for selecting referral laboratories?

What is quality control? Quality assurance? Quality system? Quality management?

A number of quality control and quality assurance measures have been specified by what?

Name activities that are involved in pre-analytical quality control?

What qualifications are required by federal regulation of individuals examining cytology specimens?

Is rescreening of negative cases a CLIA or accreditation requirement?

On what basis can negative cases be selected for rescreening?

Is proficiency testing for non-gynecologic specimens mandated by CLIA ‘88?

How long must cytology laboratories retain non-gynecological slide preparations? Gynecological specimens? What if state regulations require a longer period of time?

How long must fine needle biopsy glass slides be retained?

How long must requisitions be retained? How long must test reports be retained?

Cost Accounting and Financial management
What are direct costs? Variable costs? Fixed costs?

What guidelines are used for cost accounting in the cytology laboratory?

How often or when should a cost analysis be performed?

Cost accounting is an important laboratory management tool for determination of what?

Price determination is guided by what?

Epidemiology and Public Health

Most common cancer in men? Most common cancer in women?

Most common cause of cancer death?

What are risk factors for lung cancer? Co-factors?

What are risk factors for breast cancer?

What are risk factors for cervical cancer?

What are risk factors for endometrial cancer?

What is the sensitivity of sputum cytology?

What is the overall goal for any cancer-screening test?

What is the positive predictive value of a Papanicolaou smear; diagnostic lesion present on biopsy?

What is the false positive rate for fine needle aspiration of the breast?

What is the positive predictive value of FNA?

What factors contribute to a false negative Pap smear?

Laboratory sample processing
Fresh sputum samples can be processed by what techniques?
Describe the Saccamanno collection technique.

If a bronchial wash specimen are delayed in transportation to the laboratory, what can it be preserved in?

**Management Resources:**

- [Online Resource for Cytopathology guidelines](#)
- Pap smear risk management by process control
  - Gary W. Gill B.A., CT (ASCP), CFIAC
  - Cancer Cytopathology


Elective Resident/Fellow Rotation
(Outside of KUSOM within the US)

Resident ______________________________ Department _____________________

Dates of Rotation: ______________________

The following is a list of items the GME Office needs before a resident/fellow can be accepted into an elective resident/fellow rotation. The completed packet should be delivered to GME at G019 Robinson, Mail Stop 1060.

1. Will the resident/fellow be providing patient care? □ yes □ no
   If yes, please complete numbers 3 through 7.

2. Will the resident/fellow be observing only? □ yes □ no
   If yes, numbers 6 and 7 do not apply.

3. Will the rotation be taking place at a VA Hospital? □ yes □ no
   If yes, number 6 does not apply- please attach KS license.

4. Fill in the “red” highlighted areas located on the attached 5 pages.

5. Once the Training Site has completed, route for signatures through GME. Include attachments A and B from the training site and if applicable, a copy of the license and DEA.

6. Provide a copy of a license for the state in which the Resident/Fellow is doing their Elective. (If this is an International Elective, please use the International Rotation form found at the link below).
   http://gme.kumc.edu/documents/InternationalRotationProceduresandMemo randum.doc

7. Provide a copy of an Institutional DEA and Suffix in which the Resident/Fellow is rotating.

8. Contact Payroll at 8-5138 or 8-1451 to notify them of the following:
   a. Resident/Fellow name
   b. Residency/Fellowship Program
   c. PGY level
d. Hours on the Elective
   e. Dates of the Elective
   f. Street Address of the Elective
   g. Summary of the duties being performed
   h. Statement as to why the work is being performed at this location (i.e. employee’s convenience, residency program, etc.)
   i. Payroll will need a W-4 for the state if one exists. Some states still use the Federal W-4.

(The program in which the Resident/Fellow is rotating to should send a packet to the program similar to our Visiting Resident/Fellow form found at the link below).
http://gme.kumc.edu/documents/VisitingProceduresandMemorandum.docx

The University of Kansas Medical Center
MEMORANDUM OF AGREEMENT
BETWEEN
UNIVERSITY OF KANSAS MEDICAL CENTER, KANSAS CITY, KS
UNIVERSITY OF KANSAS SCHOOL OF MEDICINE
AND
[Training Site Name]

<<Date>>

The University of Kansas Medical Center (herein referred to as “University”), the University of Kansas School of Medicine, and the [University of ???????, Division of ???????] (herein referred to as “Training Site”) in the state of [??????? State] entered into this Agreement as of [?????????? Date ].

NOW THEREFORE, in consideration of the premises herein contained, the parties agree as follows:

This memorandum of agreement covers the following areas as required by the ACGME:

1. **Intent**: This agreement approves an elective rotation for <<Resident Name,
Degree>, a resident in the <<KUMC Department Name>> residency training program at the University, for the duration of <<Start Date>> to <<End Date>>. The rotation will consist of an educational experience intended to broaden the resident’s management and experience in providing quality patient care.

2. **Faculty**: The faculty who will assume both educational and supervisory responsibility for residents/fellows at the training site are listed in ATTACHMENT A. The faculty is under the directorship of the Training Site Director <<Training Site Director>> and the University of Kansas School of Medicine Program Director <<KUMC Program Director>>. The Training Site director is responsible for providing adequate supervision and education of the residents during the course of their educational experience at the Training Site in collaboration with the program director, as embodied by both KUMC Graduate Medical Education Policy and Procedure Manual, and the Training Site department’s staff policies.

3. **Faculty Responsibilities**: The Training Site faculty must provide appropriate supervision of residents/fellows in patient care activities and maintain a learning environment conducive to education of the residents in the ACGME Competency areas. The faculty must evaluate resident performance in a timely manner during each rotation or similar educational assignment and document this evaluation at the completion of the assignment. Evaluations are to be sent to the KUMC Program Director. The Training Site Director is responsible for informing the Program Director of the residents’ performance during the rotation and for notifying the Program Director in a timely manner of any difficulties or deficiencies in the resident’s performance.

4. **Content**: The content of the educational experience has been developed according to ACGME Program Requirements and include the Rotation Goals and Objectives found in ATTACHMENT B. In cooperation with the KUMC Program Director, the Training Site Director and Faculty are responsible for the day-to-day activities of the residents/fellows to ensure that the goals and objectives are met during the course of the educational experience at the Training Site.

5. **Evaluation of Residents**: Upon completion of the elective rotation, the Training Site shall provide the resident’s Program Director with an evaluation of the resident’s performance.

6. **Fiscal Considerations**: Residents who participate in the rotation at the Training Site are not considered employees of the Training Site, and are not entitled to receive from Training Site monetary compensation, worker’s compensation insurance, and/or any other employee benefits or status. Resident stipend shall be paid by the
University of Kansas School of Medicine, and otherwise, no party shall make financial contributions to the other related to the Agreement.

7. **Licensure**: Residents rotating to the Training Site will have a valid permanent or temporary Kansas medical license, when applicable, a valid temporary license in <<State of Training Site>>.

8. **By Laws, Rules, and Departmental Regulations**: University residents rotating to the Training Site shall agree to observe faithfully the medical staff bylaws of the Training Site and agree to be bound by its terms.

9. **Liability Insurance**: University will provide full professional liability coverage for each resident rotating to the Training Site. This coverage shall be through the University’s self-insurance program established in Kansas Statutes Annotated §40-3401, et seq.

10. **General**: Neither the Training Site nor the University shall discriminate against any resident participating in the program at the Training Site on the basis of race, color, age, religious affiliation, gender, national origin, sexual orientation or disability.


We value and appreciate our educational rotation with you.

Notices required herein shall be sent to:

For the University:  
Terance T. Tsue, M.D.  
Associate Dean for Graduate Medical Education  
University of Kansas Medical Center  
Mailstop 1060  
3901 Rainbow Boulevard  
Kansas City, KS 66160-7301

For the Training Site:  
_______________ M.D.  
Title  
Department  
Address  
City, State, Zip

With a copy to:
<table>
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<tr>
<th>Resident Signature</th>
<th>Date</th>
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**UNIVERSITY OF KANSAS MEDICAL CENTER**

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<tr>
<th>Barbara F. Atkinson, M.D.</th>
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<td>Executive Dean and Vice Chancellor for Clinical Affairs</td>
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<td><em>University of Kansas Medical Center</em></td>
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*Approved as to form:*

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<th>Steve L. Ruddick</th>
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<td>Associate General Counsel</td>
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University of Kansas Medical Center

__________________________
Terance T. Tsue, M.D. Date
Associate Dean for Graduate Medical Education
University of Kansas Medical Center

ATTACHMENT A

<<Training Site>>

TRAINING SITE DIRECTOR AND FACULTY

<<Training Site Director>>

<<Training Site F>>