Goals and Objectives for Cytopathology Rotation

Level: PGY3, PGY4, PGY5

• The 1st block in PGY3 is an introductory in nature and is followed by three more blocks in PGY-4 (please, see core rotation for PGY4 below), during which knowledge is extended and fortified.

• PGY3 will spend time with Cytotechnologists in the following areas:
  1) Gynecologic Cytology (1 week)
  2) Effusion Cytology (1 week)
  3) Urinary Cytology (1 week) and
  4) FNAB Pulmonary Cytology (1 week)

• The PGY-5 year is one of senior leadership and the resident should be able to assume responsibility for organizing the service and supervising junior residents and students. The resident should have mastery of the information contained in standard texts and be prompt in using the literature to solve specific problems. The resident will be responsible for presentations at conferences and for teaching junior residents and students on a routine basis. The PGY 5 should begin to have an understanding of the role of the practitioner in an integrated health care delivery system and to be aware of the issues in health care management facing patients and physicians.

Medical Expert/Clinical Decision-Maker

General Requirements

• Demonstrate diagnostic skills for accurate and timely diagnosis of gynecological and non-gynecological Cytopathology specimens.

• Access and apply relevant information to clinical practice.

• Demonstrate effective consultation services with respect to referred in consultation cases.

Specific requirements

• Demonstrate knowledge of the required elements for specimen identification during submission of a cytologic sample (i.e. multiple unique patient identifiers, specimen type, submitting physician, etc.) as well as specimen acceptance and rejection criteria.

• Demonstrate knowledge and familiarity with the methods of collection, handling, storage, stabilization, transportation and archival retention of cytology specimens.
• Demonstrate understanding of cytopreparatory processing (pre-slide production, slide production and staining) for common cytology preparations including cell block production.

• Demonstrate knowledge of sampling and preparation methods for Conventional Smears and Liquid-based preparations for cervicovaginal cytology.

• Demonstrate knowledge of provincial/territorial management guidelines tailored to the 2001 Bethesda System classification for abnormal cervical cytology reporting.

• Demonstrate knowledge of the criteria for adequacy and the current laboratory reporting system (such as negative, inflammatory/reactive, atypical/suspicious, neoplastic or malignant) for fine needle aspiration (FNA) biopsy, including the Bethesda System for reporting thyroid cytopathology and exfoliative non-gynecologic cytopathology specimens from the various sampled body sites such as respiratory tract, urine and bladder washings, pleural, pericardial and peritoneal fluids, peritoneal washings, cerebrospinal fluid, gastrointestinal tract, breast, thyroid, salivary gland, lymph nodes, liver, pancreas, kidney and adrenal gland, ovary and soft tissue.

• Demonstrate knowledge of specimens/situations requiring expedited reporting (critical values in cytopathology).

• Demonstrate knowledge of the professional requirements, roles and responsibilities of the Medical Director of the Cytopathology Laboratory, Head of Cytopathology, Associate/Consultant Pathologists, Supervisory Cytotechnologist, Cytotechnologist, Medical Laboratory Assistants and laboratory manager/supervisor.

• Demonstrate knowledge of how to assess cytopathology specimens for cellular interpretation/diagnosis from different sites (see #6), comprehensively taking into consideration the specimen type and the sampling method used.

• Demonstrate knowledge of HPV testing in cervical cancer screening programs including specimen acquisition and testing methodologies.

• Demonstrate knowledge of the application of ancillary techniques to cytological specimens including immunocytochemistry, flow cytometry, and molecular studies (FISH; PCR).

• Demonstrate the knowledge to rapidly evaluate FNA biopsy specimens from different sites (see #6), including determination of specimen adequacy and the need for triage for ancillary techniques, and the appropriate collection of materials for such techniques.

• Demonstrate knowledge of superficial FNA biopsy procedure including appropriately taking history, correctly obtaining informed consent, competently examining the lesion to be biopsied, preparing the patient and biopsy instruments, procuring the specimen, and preparing and staining the smears, with preliminary interpretation of the smears and collection of diagnostic materials with proper handling for ancillary techniques.

• Demonstrate the ability to compose clear, concise and comprehensive cytopathology
reports for specimens from various body sites (see # 6) based upon the final diagnostic findings.

- Demonstrate knowledge of the principles of automated screening and screening assist devices for gynecologic cytopathology specimens.

- Demonstrate knowledge of quality control, quality assurance and quality improvement including workload limit guidelines, prospective rescreening, retrospective rescreening, cytohistologic correlations, materials retention requirements, monitoring of turn around time, diagnostic rates, false negative proportion, etc.

Communicator

General Requirements

- Consult effectively with other cytopathologists, cytotechnologists and other members of the team.
- Establish effective relationships with consulting physicians and surgeons.
- Discuss appropriate information with the health care team, and the patient if necessary.

Specific Requirements

- Assist in the continuing education of cytopathologists and cytotechnologists by participating and presenting in cytopathology rounds.
- Act as consultants to clinical colleagues on the interpretation and relevance of cytological findings, with particular regard to their significance in the management of the patient.
- Understand the information cytology should provide in a given clinical situation and be able to communicate it effectively in an oral and written form.

Collaborator

General Requirements

- Consult effectively with other physicians and health care professionals.
- Contribute effectively to other interdisciplinary team activities.

Specific Requirements

- Must have experience in clinical medicine and surgery sufficient to achieve a sound understanding of the effects of disease and the role of pathology in its management.
- Demonstrate the ability to advise on the appropriateness of obtaining cytological specimens and following examination of these, to advise on further appropriate investigations.

Manager

General Requirements

- Utilize resources effectively to achieve an accurate diagnosis.
- Allocate finite health care resources wisely.
- Work effectively and efficiently in a health care organization.
- Utilize information technology to optimize patient care, life-long learning and other activities.

Specific Requirements
• List and explain the various potential causes of specimen identification errors in both gynecologic and non-gynecologic cytopathology.
• List and identify the causes of common preparatory artifacts and explain how to confirm these causes and to manage such problems for quality assurance and diagnostic purposes.
• List and identify the causes for common specimen contaminants and explain how to confirm these causes and to manage such problems for quality assurance and diagnostic purposes.
• Explain and demonstrate the proper application of continuous quality assurance and regulatory compliance methods.
• Explain the importance of correlation of prior and subsequent histopathology with cytopathology cases, both in aggregate for quality assurance purposes and on a case-by-case basis for diagnostic purposes.
• Explain and demonstrate the proper prioritization of workflow so that the most urgent cases are processed and examined first.
• Understand the role of the Cervical Cancer Prevention Program of Cancer Care Nova Scotia.
• Health Advocate

General Requirements

• Identify the important determinants of health affecting patients including screening for cancer.
• Recognize and respond to those issues where advocacy is appropriate.

Specific Requirements

• As members of an interdisciplinary team of professionals responsible for individual and population health care, the cytopathologist will endeavour to ensure that laboratory practices and test selection are regularly evaluated to determine that they meet these community needs.

Scholar

General Requirements

• Develop, implement and monitor a personal continuing education strategy with respect to cytopathology.
• Critically appraise sources of medical information and recognize the current best sources for research reporting in cytopathology.
• Facilitate learning of patients, house staff/students and other health professionals.
• Contribute to development of new knowledge in cytopathology.

Specific Requirements

• In the middle of rotation, a small research project or case study should be discussed with the rotation supervisor. This will be presented at one of the Cytopathology Rounds.

Professional

General Requirements

• Deliver highest quality care with integrity, honesty and compassion.
• Exhibit appropriate personal and interpersonal professional behaviours.
• Practice medicine ethically consistent with obligations of a physician.
• Demonstrate the knowledge, skills and attitudes relating to gender, culture, and ethnicity pertinent to cytopathology.

Specific Requirements

• Act as an appropriate role model for students and others.
• Demonstrate a professional attitude to colleagues, as well as to other laboratory staff.
• Have an appreciation of the crucial role of the cytopathologist in providing quality patient care. This will include knowledge of individual professional limitations and the necessity of seeking appropriate second opinions.

CYTOPATHOLOGY (CORE ROTATION FOR PGY4)

Gyn benign and abnormal 1 week
Urinary and effusions 1 week
Respiratory and FNA lung 1 week
FNA breast and FNA lymph node and CSF 1 week
FNA salivary gland and FNA thyroid and QA/QC 1 week
FNA liver and FNA pancreas and GI 1 week
Sign out with Cytopathologist (Assessment) 6 weeks
Complete 30 FNAB on-site adequacy assessments
Spend ½ day in cytology technical area

TOTAL SCHEDULED TIME 12 weeks

Each unit is evaluated with a slide test and a final slide test will be given at the end of the 6 week rotation with the Cytotechnologists. An evaluation form (see below) will be completed by the teaching Cytotechnologists (Charge and Senior) indicating grades for slide tests, evaluation of CANMeds roles and other feedback. A form documenting on-site adequacy assessments (see below) performed will be completed by the Resident. These forms and copies of the slide tests will be submitted to the Director of Cytopathology who will complete the evaluation for the University.

Cytopathologists complete the Cytopathologist Assessment form (see attached) in the 6 weeks of sign-out with Cytopathologists to evaluate the Resident’s diagnostic skill. This form is submitted to the Director of Cytopathology at the end of the rotation.
Suggested Reading


5. GUIDELINES from the Canadian Society of Cytopathology (CSC) at http://www.cap-acp.org/cytology.cfm:

6. Canadian Society of Cytopathology Guidelines for Practice & Quality Assurance in Cytopathology Updated 2012

7. Guidelines for Review of PAP Smears in the Context of Litigation or Potential Litigation

8. Practice Guidelines for Fine Needle Aspiration Cytology of the Thyroid

9. The CSC Recommended Guidelines For The Practice Of Breast Cytopathology

10. Practice Guidelines for Urothelial Cytopath

11. Guidelines for Thyroid FNAB Reporting

12. CSC Guidelines for Reporting Results on Cytological Specimen from the Respiratory Tract.
## CASE LOG BOOK

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<th>Case #</th>
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The table is meant to record cases with columns for Case #, Resident’s Diagnosis, Cytopathologist Disagreement (AGREE/Disagree), Major and Minor disagreements.
# ADEQUACY ASSESSMENT LOG BOOK
(A total of 30 adequacy assessments must be performed)

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PGY-4 CYTOPATHOLOGY ROTATION ASSESMENT

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Date of rotation:

General Considerations:

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Practical Examinations: Glass slide tests

1. Gynecologic ___%
2. Urinary and effusions ___%
3. Respiratory and FNA lung ___%
4. FNA breast, FNA LN, CSF ___%
5. FNA salivary gland and FNA thyroid ___%
6. FNA liver, FNA pancreas and GI ___%
7. Final ___%

Resident's Strengths:

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Areas that need improving:

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Please give this form to the Director of Cytopathology after completion.
The PGY-3 will be evaluated by oral quizzing. An evaluation form (see attached) with feedback will be completed by the teaching Cytotechnologists (Senior and Charge) and submitted to the Director of Cytopathology at the end of the block.

Name:

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**Resident's Strengths:**

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**Areas that need improving:**

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Evaluated by: ___________________________ Date: ___________________________

Please give this form to the Director of Cytopathology after completion.