



CYTOLOGY REFRESHER COURSE LIST

Updated: January 2009

Courses on this list are approved for members who are eligible to practice in cytology.

Please note: This list is a summary of course information. Applicants should contact the institution offering the course(s) for the most up-to-date detailed information/registration protocols.

All refresher/updating courses must have an evaluation component and the transcript **MUST** state the number of hours in the course.

All courses on this list are delivered by distance education.

NOTE: Other courses will be considered for approval by the Registration Committee when a request and the course outline are submitted to the CMLTO.

Institution	Course	Prerequisite/Cost
<p>Canadian Society for Medical Laboratory Science (CSMLS) www.csmls.org/CE</p>	<p>FNAC of the Thyroid (2820) Basic Level - 15 PEP hours/0 CPS/ART <i>At the completion of this course, the learner will be able to:</i></p> <ul style="list-style-type: none"> ▪ Describe the fine needle aspiration biopsy technique and the preparation of thyroid samples ▪ Describe the basic anatomy, physiology and histology of the thyroid gland ▪ Describe the cytology of relevant benign disorders of the thyroid gland ▪ Describe the cytology of follicular/Hürthle cell nodules ▪ Describe the cytology of malignant tumours of the thyroid gland <p>Other Course Details:</p> <ul style="list-style-type: none"> ▪ Begins March and October ▪ Runs for one month ▪ Notes and images on CD ▪ One practice assignment and one assignment 	<p>Members \$225 Non-Members \$338</p> <p>Spring registration 2820-98 S Fall Registration 2820-98 F</p>
<p>Canadian Society for Medical Laboratory Science (CSMLS) www.csmls.org/CE</p>	<p>FNAC of the Liver and Pancreas (2817) Basic Level - 15 PEP hours/0 CPS/ART <i>At completion of this course, the learner will be able to:</i></p> <ul style="list-style-type: none"> ▪ List and describe the normal cells of the liver and pancreas ▪ Describe the cytomorphology associated with common pathologic conditions in the absence of cancer ▪ Describe the cytomorphology in the presence of cancer ▪ Differentiate primary from secondary cancers ▪ Describe the cytomorphologic patterns of the commonly seen secondary liver cancers ▪ Describe the commonly used cytopreparatory methods ▪ List the commonly used cytopreparatory methods ▪ List the commonly used special staining techniques utilized for establishing differential 	<p>Members \$225 Non-Members \$338</p> <p>Spring registration 2817-98S Fall Registration 2817-98F</p>

Institution	Course	Prerequisite/Cost
	<p>diagnoses</p> <p>Other Course Details:</p> <ul style="list-style-type: none"> ▪ Begins March and October ▪ Runs for one month ▪ Notes and images on CD ▪ One practice assignment and one assignment 	
<p>Canadian Society for Medical Laboratory Science (CSMLS) www.csmls.org/CE</p>	<p>FNAC of the Breast (4178) Basic Level - 15 PEP hours/0 CPS/ART</p> <p><i>At the completion of this course, the learner will be able to:</i></p> <ul style="list-style-type: none"> ▪ Explain the clinical usefulness of FNA cytology of the breast ▪ Describe the anatomy physiology and histology of the breast ▪ Describe the methodology for FNA of the breast ▪ Describe the cytopreparatory technique for FNA specimens from the breast ▪ Discuss the cytologic features of normal constituents of an FNA from the breast ▪ Describe inflammatory and other non-neoplastic conditions of the breast and their cytologic findings ▪ Describe the benign and malignant conditions of the breast and their cytologic findings <p>Other Course Details:</p> <ul style="list-style-type: none"> ▪ Begins March and October ▪ Runs for one month ▪ Notes and images on CD ▪ One practice assignment and one assignment 	<p>Members \$225 Non-Members \$338</p> <p>Spring registration 4178-98S Fall Registration 4178-98F</p>
<p>Canadian Society for Medical Laboratory Science (CSMLS) www.csmls.org/CE</p>	<p>TFNA of the Lung (2943) Basic Level - 15 PEP hours/0 CPS/ART</p> <p><i>At the completion of this course, the learner will be able to:</i></p> <ul style="list-style-type: none"> ▪ Describe the TFNA technique ▪ Discuss the clinical indications and contra-indications of the TFNA technique ▪ Discuss the advantages and limitations of TFNAC ▪ Understand ancillary techniques used in the diagnosis of TFNA ▪ Describe the cytomorphology of infectious 	<p>Members \$225 Non-Members \$338</p> <p>Spring registration 2943-98S Fall Registration 2943-98 F</p>

Institution	Course	Prerequisite/Cost
	<p>diseases and inflammatory and non-neoplastic conditions</p> <ul style="list-style-type: none"> ▪ List relevant clinical data and cytomorphology of benign and malignant tumours <p>Other Course Details:</p> <ul style="list-style-type: none"> ▪ Begins March and October ▪ Runs for one month ▪ Notes and images on CD ▪ One practice assignment and one assignment 	
<p>Canadian Society for Medical Laboratory Science (CSMLS) www.csmls.org/CE</p> <p>NEW</p>	<p>Body Fluids [9825] Basic Level - 6 PEP hours/0 CPS/ART</p> <p>At the completion of this course, the learner will be able to:</p> <ul style="list-style-type: none"> ▪ Describe the technical aspects of specimen collections in order to have the ideal specimen for evaluation ▪ Detail the methods for cell counting using both manual and automated cell counting methods ▪ Describe the technique for preparing cytospin films using the SHANDON cytocentrifuge ▪ Outline the special tips and techniques available to enhance the quality of cytospin films ▪ Tabulate the method for staining films using the Papanicolaou stain and describe the findings in normal cell types ▪ Outline the technique for staining films using a Wright-Giemsa stain ▪ Draw and identify the cells typically found in body fluids ▪ Describe the appearance and normal occurrence of lymphoid, myeloid, mononuclear and lining cells ▪ Describe the features of normal cells and compare them to typical features of malignant cells ▪ Tabulate a scheme for differentiating normal from malignant cells ▪ Describe in detail the common artefacts that may be seen in cellular detail of cells seen in cytospin preparations of body fluids <p>Other Course Details:</p>	<p>Members \$60 Non-Members \$90</p> <p>Continuous registration 9825-08</p>

Institution	Course	Prerequisite/Cost
	<ul style="list-style-type: none"> ▪ Work at your own pace - you set the schedule. Your studies are supported by the author/instructor, self-assessment exercise and your learning is evaluated by an invigilated quiz (you choose the place and time). ▪ New! You can choose whether to write a paper exam or online computer exam through E-Learning Society. <p>Individuals registered in a self-paced course must complete the course within 12 months of registration. After 12 months the registration will expire. No refund will be provided for expired registrations.</p>	

<p>Canadian Society for Medical Laboratory Science (CSMLS) www.csmls.org/CE</p>	<p>Hormonal Cytology: An Advanced Course in Gynecological Cytology (4219) Advanced Level - 15 PEP hours/1.0 CPS/ART</p> <p>At the completion of this course, the learner will be able to:</p> <ul style="list-style-type: none"> ▪ Obtain an advanced cognitive level of understanding in hormonal cytology ▪ Describe the physiology of the ovarian cycle ▪ Describe the physiology of the menstrual cycle ▪ State the indications for hormonal cytology ▪ State conditions rendering hormonal evaluations invalid or inaccurate ▪ Describe specimen collection and cytopreparation ▪ Describe and discuss various cell patterns associated with normal cytophysiological conditions ▪ Describe and discuss various cell patterns associated with various endocrinopathies ▪ Describe and discuss the various cytohormonal indices ▪ Describe and discuss the cytology of exogenous sex steroids ▪ Describe and discuss the proliferation test ▪ Describe how to accurately report cytohormonal findings <p>Other Course Details:</p> <ul style="list-style-type: none"> ▪ Begins March and October 	<p>Members \$250 Non-Members \$375</p> <p>Spring registration 4219-06S Fall Registration 4219-06F</p>
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<p>Canadian Society for Medical Laboratory Science (CSMLS) www.csmls.org/CE</p>	<p>FNAC of the Kidney and Adrenal Gland (4183) Advanced Level - 30 PEP hours/2.0 CPS/ART</p> <p>At the completion of this course, the learner will be able to describe:</p> <ul style="list-style-type: none"> ▪ The urinary system and its organ's functions ▪ The location of the kidneys and adrenal glands ▪ The external and internal anatomy of the kidney and adrenal gland ▪ The functions of the kidney and adrenal gland ▪ Renal physiology ▪ Urinalyses interpretation and diagnosis ▪ The histology of the kidney and adrenal gland ▪ Fine needle aspiration cytology techniques, indications, complications, diagnostic dilemmas, and statistics ▪ Normal cytology of the kidney and adrenal gland ▪ The cytology of various renal and adrenal pathologies, including the differential diagnosis ▪ Gross examinations and chemical analyses of renal and adrenal aspirates ▪ The incidence and risk factors of renal and adrenal gland cancers ▪ Gross examinations and chemical analyses of renal and adrenal aspirates ▪ The incidence and risk factors of renal and adrenal gland cancers ▪ Clinical presentations of renal and adrenal gland pathologies ▪ Diagnostic modalities of renal and adrenal gland pathologies ▪ Staging and grading of renal and adrenal gland cancers ▪ Treatment of renal and adrenal gland cancers <p>Other Course Details:</p> <ul style="list-style-type: none"> ▪ Begins March and October ▪ Runs for two months ▪ Notes and images on CD 	<p>Members \$325 Non-Members \$488</p> <p>Spring registration 4183-99S Fall Registration 4183-99F</p>

	<ul style="list-style-type: none"> ▪ One practice assignment and one assignment 	
<p>Canadian Society for Medical Laboratory Science (CSMLS) www.csmls.org/CE</p>	<p>Cervical Cancer Screening: Continuum of Cervical Cancer Control and the Pap Test (4362) Advanced Level - 60 PEP hours/4.0 CPS/ART</p> <ul style="list-style-type: none"> ▪ In the first unit, you will address the continuum of cancer control, history of the Pap test, and Canadian perspectives on screening for cervical cancer ▪ Unit 2 explores the human papilloma virus and its relationship to cervical cancer, cytology screening, and reporting of Pap tests ▪ Your study of Unit 3 will consider the management of abnormal Pap tests and further develop your understanding of the future of cervical cancer screening ▪ You will also improve your research and writing skills as you complete one research essay to support the communication skills that are critical to laboratory practice <p>Other course details:</p> <ul style="list-style-type: none"> ▪ Begins January, April and September ▪ Runs for three months ▪ Three assignments, one research essay, and a final examination 	<p>Members \$350 Non-Members \$525</p> <p>Fall Registration 4362-03F Winter Registration 4362-03W Spring Registration 4362-03S</p>
<p>Canadian Society for Medical Laboratory Science (CSMLS) www.csmls.org/CE</p>	<p>Non-Gynecological Cytology (2578) Basic Level – 52.5 PEP hours/0 CPS/ART <i>At the completion of this course, the learner will be able to:</i></p> <ul style="list-style-type: none"> ▪ Describe briefly the anatomy, histology and physiology of the respiratory, digestive, urinary tract, as well as the central nervous system and body cavities ▪ Describe the normal cytologic findings of all sites listed above ▪ Describe in detail the cytomorphic changes in the absence of cancer of all sites listed above ▪ Describe in detail the cytomorphic changes in the presence of primary and secondary cancers of all sites listed above ▪ Describe briefly the clinical usefulness of cytologic findings and the possible sources of 	<p>Members \$325 Non-Members \$488</p> <p>Spring Registration 2578-98S Fall Registration 2578-98F</p>

	<p>misinterpretation at all sites listed above</p> <ul style="list-style-type: none"> ▪ Describe the most commonly needed specimen collection methods and cytopreparatory procedures of all sites listed above ▪ List the most commonly applied special staining techniques used for differential diagnoses <p>Other Course Details:</p> <ul style="list-style-type: none"> ▪ Begins March and October ▪ Runs for three months ▪ Notes and images on CD ▪ Five assignments 	
<p>The Michener Institute www.michener.ca</p>	<p>CY611 Gynecological Cytology</p> <p>This refresher course for practicing cytotechnologists and those re-entering the field is recommended by the CMLTO as meeting the didactic requirements for practice in gynecological cytology.</p> <ul style="list-style-type: none"> ▪ Review preparation and staining techniques ▪ Discuss common abnormalities including inflammatory processes, micro-organisms, benign processes and squamous intraepithelial lesions ▪ Understand standard reporting terminology ▪ Review criteria of malignancy ▪ Study cancer of the cervix <p>Other Course Details:</p> <ul style="list-style-type: none"> ▪ Images and self-assessments are accessed using CD-ROM/DVD and standard Internet browser software. ▪ Continuous intake ▪ Five assignments and final examination 	<p>\$535.00 (includes CD-ROM Catalogue of Gynecologic Cytology)</p>