

Objectives of Training in the Specialty of General Pathology

2012 VERSION 1.0

This document applies to those who begin training on or after July 1st, 2012.

(Please see also the "Policies and Procedures.")

DEFINITION

A General Pathologist is a specialist who is trained in diagnosis and in laboratory management, incorporating and integrating all aspects of laboratory methodology, playing a key role in quality assurance and the introduction of emerging technologies. This includes providing consultation to medical colleagues using morphologic techniques such as histopathology, cytology, autopsy, forensics and clinical laboratory methods, namely biochemistry, laboratory hematology, blood transfusion and microbiology. General Pathology is distinct because the training is divided between Anatomical Pathology and clinical laboratory medicine. General Pathologists are trained to practice in a variety of settings including large metropolitan, regional, and community hospitals, and may play a role in teaching or research. General Pathology can also be a route for sub-specialty or diploma training.

GOALS

Upon completion of training, a resident is expected to be a competent specialist in General Pathology capable of assuming a consultant's role in the specialty. The resident must acquire a working knowledge of the theoretical basis of General Pathology, including its foundations in the basic medical sciences and research.

Residents must demonstrate the requisite knowledge, skills, and attitudes for effective patient-centred care and service to a diverse population. In all aspects of specialist practice, the graduate must be able to address issues of gender, sexual orientation, age, culture, ethnicity and ethics in a professional manner.

GENERAL PATHOLOGY COMPETENCIES:

At the completion of training, the resident will have acquired the following competencies and will function effectively as a:

Medical Expert

Definition:

As *Medical Experts*, General Pathologists integrate all of the CanMEDS Roles, applying medical knowledge, clinical skills, and professional attitudes in their provision of patient-centred care. *Medical Expert* is the central physician Role in the CanMEDS framework.

Core competence will be reflected in achievements at the introductory and working knowledge levels. This is the minimum training required to achieve successful completion of training in General Pathology.

Introductory knowledge is defined as the ability to recognize, identify, or describe principles. For example, knowledge of viral classification and identification techniques.

Working knowledge is defined as the ability to use information in the day-to-day practice of General Pathology. For example, the ability to diagnose common inflammatory and neoplastic conditions both histologically and cytologically; advise on appropriate biochemical testing and laboratory instrumentation pertinent to supervising a community or regional hospital laboratory; offer consultative services to clinical colleagues on such things as laboratory utilization.

Key and Enabling Competencies: General Pathologists are able to...

- 1. Function effectively as consultants, integrating all of the CanMEDS Roles to provide optimal, ethical and patient-centred medical care
 - 1.1. Perform a General Pathology consultation, including the presentation of well-documented assessments and recommendations in written and/or verbal form
 - 1.2. Demonstrate use of all CanMEDS competencies relevant to General Pathology
 - 1.3. Identify and appropriately respond to relevant ethical issues arising in patient care
 - 1.4. Demonstrate the ability to prioritize professional duties when faced with multiple cases and problems
 - 1.5. Demonstrate compassionate and patient-centred care
 - 1.6. Recognize and respond to the ethical dimensions in medical decision-making
 - 1.7. Demonstrate medical expertise in situations other than patient care, such as providing expert legal testimony or advising governments, as needed

2. Establish and maintain clinical knowledge, skills and attitudes appropriate to General Pathology

- 2.1. Apply working knowledge of the clinical and fundamental biomedical sciences relevant to General Pathology, including:
 - 2.1.1. Anatomical Pathology
 - 2.1.1.1. Normal anatomy and its common variants with a basic understanding of embryological development

- 2.1.1.2. Common inflammatory and neoplastic conditions on both histological and cytological material in all organ systems
- 2.1.1.3. Normal gross and light microscopic appearance of tissues both as intact organs and biopsy material
- 2.1.1.4. Principles of tissue fixation and preparation of specimens for microscopic examination
- 2.1.1.5. Normal appearance in common fixatives of tissue cells, either exfoliated or obtained by needle aspiration
- 2.1.1.6. Principles of cell biology, immunology, medical genetics and pathogenic mechanisms with an understanding of changes seen in disease states
- 2.1.1.7. Principles of light microscopy including polarization, dark field and fluorescence microscopy
- 2.1.1.8. Principles of specialized histology techniques including histochemical, immunocytochemical, flow cytometry, morphometry, and hybridization techniques and their application in diagnosis
- 2.1.1.9. Regulations regarding retention of specimens and processed surgical material as well as the retention of records
- 2.1.1.10. Regulations governing consent for post-mortem examination and the types of cases that must be reported to the coroner or medical examiner
- 2.1.1.11. Relevant autopsy techniques and expected findings as well as the practical aspects of establishing time of death and identifying remains
- 2.1.1.12. Definitions of cause, mechanism and manner of death, including which autopsies should be referred to Forensic Pathologists
- 2.1.1.13. Principles of sampling of tissues and fluids for toxicological examination and the legal requirements for the handling of these samples
- 2.1.1.14. Recognized standards of workplace safety
- 2.1.1.15. Regulations governing transportation of dangerous goods
- 2.1.1.16. Utilization of ancillary techniques such as biochemical, microbiological, photographic, and radiological studies in pathology
- 2.1.1.17. Principles of quality assurance pertinent to surgical, cytology and autopsy pathology
- 2.1.1.18. Gross and microscopic appearance of diseased tissue and cells

2.1.2. Medical Biochemistry

- 2.1.2.1. Demonstrate a working knowledge of physiology, biochemical testing and laboratory instrumentation pertinent to supervising a community or regional hospital laboratory and offering consultative services to clinical colleagues. The General Pathologist must understand the pathobiology of, and test strategies pertinent to, the diagnosis of common disorders of:
 - 2.1.2.1.1. Body water and electrolytes

- 2.1.2.1.2. Acid-base control
- 2.1.2.1.3. Renal function
- 2.1.2.1.4. Liver function
- 2.1.2.1.5. Lipid metabolism
- 2.1.2.1.6. Bone metabolism
- 2.1.2.1.7. Pancreatic and digestive function
- 2.1.2.1.8. Cardiac and vascular function
- 2.1.2.1.9. Blood glucose and carbohydrate metabolism
- 2.1.2.1.10. Iron, porphyrin and bilirubin metabolism
- 2.1.2.1.11. Endocrine function, including but not limited to thyroid, parathyroid, gonadal, pituitary, and adrenal
- 2.1.2.1.12. Uric acid metabolism
- 2.1.2.1.13. Protein metabolism
- 2.1.2.2. Demonstrate introductory knowledge of nutrition, cancer-associated biochemical abnormalities, therapeutic drug monitoring, pharmacokinetics, toxicology, and pediatric and prenatal clinical biochemistry, with special emphasis on testing available in community or regional hospital laboratories
- 2.1.2.3. Demonstrate working knowledge of statistics pertinent to clinical biochemistry, including the concepts of sensitivity, specificity, efficacy, precision, accuracy, incidence, prevalence, predictive value, reference ranges, means, standard deviation, variance, parametric and non-parametric distribution, and the control of pre-analytical variables
- 2.1.2.4. Demonstrate working knowledge of common analytical techniques and instrumentation in the biochemical laboratory
- 2.1.2.5. Demonstrate working knowledge of resource-efficient laboratory equipment selection
- 2.1.2.6. Demonstrate working knowledge of the basic components of a laboratory information system and its application to the modern biochemical laboratory
- 2.1.3. Medical Microbiology
 - 2.1.3.1. Demonstrate a working knowledge of bacterial organisms and their clinical presentation, appropriate specimen collection, microscopic appearance, culture characteristics, diagnostic tests, and drug sensitivity, including those that are normally isolated or otherwise identified in a regional hospital laboratory. These bacterial organisms include but are not limited to Staphylococci, streptococci, Corynebacteriae (including other aerobic and facultative gram-positive rods), Clostridia, Neisseriae (including moraxella), Enterobacteriaceae, Campylobacter, Pseudomonas (and other common gram negative opportunistic bacilli), Hemophilus,

- Bordatellae, Legionellae, Chlamydiae, Mycoplasmae, Spirochetes, and common pathogenic mycobacteria
- 2.1.3.2. Demonstrate introductory knowledge of common fungal, parasitic and viral organisms in pathologic specimens, and the ability to utilize serologic and culture investigations for diagnosis, including but not limited to:
 - 2.1.3.2.1. Candida, Aspergillus, Histoplasma, Coccidioides, Blastomyces, Cryptococcus, Mucor, Pneumocystis
 - 2.1.3.2.2. Malaria, ehrlichia, common helminthic infections (cestodes, Enterobius, Strongyloides, Ascaris), Giardia, Schistosomes, Cryptosporidia, Microsporidia, Entamoeba, Dientamoeba, blastocystis, echinococcus, Trichinella
 - 2.1.3.2.3. Hepatitis A, B, and C, and Human Immunodeficiency Virus (HIV), with emphasis on serologic testing
- 2.1.3.3. Demonstrate an introductory knowledge of testing strategies, specimen collection and handling, laboratory safety, and interpretation of diagnostic reports for less common viral, bacterial, fungal, and parasitic organisms
- 2.1.3.4. Demonstrate a working knowledge of hospital infection control, including prevention and control of infection and epidemics, disinfection and sterilization procedures, appropriate handling and disposal of infectious materials, employee health and laboratory safety issues, and pertinent public health regulations
- 2.1.3.5. Demonstrate an introductory knowledge of molecular diagnostic methodologies and their use in microbiological diagnosis and outbreak investigation
- 2.1.3.6. Demonstrate knowledge of common quality control procedures applicable to microbiology
- 2.1.4. Hematological Pathology and Transfusion Medicine
 - 2.1.4.1. Demonstrate a working knowledge of:
 - 2.1.4.1.1. Normal hematopoiesis and cell biology as it pertains to the structure and function of all hematopoietic elements
 - 2.1.4.1.2. The structure and the functional relationships of all components of the reticulo-endothelial system
 - 2.1.4.1.3. The components of humoral and cellular immunity, the role of complement and its pathways of activation
 - 2.1.4.1.4. The components and functional relationship of the hemostatic and fibrinolytic systems, including control mechanisms
 - 2.1.4.1.5. Immunohematology including major blood group systems and the role of the human leukocyte antigen (HLA) system

- 2.1.4.1.6. Genetics and molecular diagnostics as applicable to hematologic disorders
- 2.1.4.1.7. Hematopathological disorders, specifically common problems of all hematopoietic and lymphoid tissues including diagnostic strategies, morphologic findings, clinical associations, complications, and basic principles of management
- 2.1.4.1.8. The role of cytogenetics, molecular studies, and flow cytometry
- 2.1.4.1.9. Hemostasis and coagulation disorders, including thrombosis
 - 2.1.4.1.9.1. Major congenital and acquired disorders of coagulation, including strategies for investigation, clinical associations, and principles of management
- 2.1.4.1.10. Common problems of blood banking, including but not limited to incompatible cross-match, auto- and allo-immune antibodies and their differentiation, and neonatal blood banking issues
- 2.1.4.1.11. Investigation and classification of adverse reactions to blood component therapy
- 2.1.4.1.12. Appropriate use of blood components in the treatment of hematological and coagulation disorders
- 2.1.4.1.13. Current Canadian Blood Services (CBS) policies, procedures and products, including autologous and directed donations
- 2.2. Describe the CanMEDS framework of competencies relevant to General Pathology
- 2.3. Apply lifelong learning skills of the Scholar Role to implement a personal program to keep up-to-date, and enhance areas of professional competence
- 2.4. Contribute to the enhancement of quality care and patient safety in General Pathology, integrating the available best evidence and best practices

3. Perform a complete and appropriate clinicopathological assessment of a case

- 3.1. Identify and explore issues to be addressed in the handling of a case
- 3.2. Elicit a history that is relevant, concise and accurate to context and preferences for the purposes of disease prevention and health promotion, diagnosis and/or management
- 3.3. Perform a focused examination that is relevant and accurate for the purposes of disease prevention and health promotion, diagnosis and/or management
- 3.4. Select medically appropriate investigative methods in a resource-effective and ethical manner
- 3.5. Demonstrate effective clinical problem solving and judgment to address patient problems, including interpreting available data and integrating information to generate differential diagnoses and management plans

4. Use preventive and therapeutic interventions effectively

- 4.1. Implement a management plan in collaboration with clinicians and, when appropriate, the patient or patient's family
- 4.2. Demonstrate appropriate and timely application of preventive and diagnostic interventions relevant to General Pathology
- 4.3. Ensure appropriate informed consent is obtained for pathology procedures
- 4.4. Ensure appropriate communication with patients and/or family members with respect to the handling of surgical and post-mortem procedures in the context of a multicultural society

5. Demonstrate proficient and appropriate use of procedural skills, both diagnostic and therapeutic

- 5.1. Demonstrate effective, appropriate, and timely performance of diagnostic procedures relevant to General Pathology, including:
 - 5.1.1. Anatomical Pathology
 - 5.1.1.1. Diagnose a broad range of pathological conditions from surgical pathology, cytology, and autopsy materials
 - 5.1.1.2. Handle specimens appropriately and obtain satisfactory photomicrographs and photographs
 - 5.1.1.3. Perform an intraoperative consultation
 - 5.1.1.4. Perform a complete autopsy, including for medico-legal purposes

5.1.2. Medical Microbiology

- 5.1.2.1. Use a microscope for morphologic assessment of microorganisms effectively
- 5.1.2.2. Analyze microbiologic data and correlate it to clinical information
- 5.1.2.3. Develop, adhere to and review quality control data
- 5.1.2.4. Review and supervise bench level tests available and develop test algorithms

5.1.3. Hematopathology and Transfusion Medicine

- 5.1.3.1. Perform morphological assessments and diagnosis of blood, bone marrow and lymph node based disorders with utilization of current technologies as appropriate
- 5.1.3.2. Review and supervise bench level tests available in a community or regional hospital hematology laboratory. This will include manual, semi-automated, and automated tests in addition to the basic principles of test methodology and instrumentation
- 5.1.3.3. Make decisions regarding appropriate use of current diagnostic methodologies for hematological diagnosis

- 5.1.3.4. Construct test algorithms to diagnose common disorders of hemostasis and coagulation
- 5.1.3.5. Supervise bench level testing in the blood bank and recognize standards as they apply to the testing and release of blood products
- 5.1.3.6. Assess transfusion orders in relation to appropriateness, risks and alternatives to transfusion
- 5.1.3.7. Investigate transfusion reactions
- 5.1.3.8. Conduct bone marrow aspiration and biopsy
- 5.1.3.9. Develop, adhere to and review quality control data
- 5.1.3.10. Review and supervise bench level tests available and develop test algorithms

5.1.4. Medical Biochemistry

- 5.1.4.1. Use a microscope for morphologic assessment of urinalysis and body fluids effectively
- 5.1.4.2. Interpret protein electropheresis and immunofixation studies
- 5.1.4.3. Develop, adhere to and review quality control data
- 5.1.4.4. Review and supervise bench level tests available and develop test algorithms
- 5.2. Ensure appropriate informed consent is obtained for procedures
- 5.3. Document and disseminate information related to procedures performed and their outcomes
- 5.4. Ensure adequate follow-up is arranged for procedures performed

6. Seek appropriate consultation from other health professionals, recognizing the limits of their own expertise

- 6.1. Demonstrate insight into their own limits of expertise
- 6.2. Demonstrate effective, appropriate, and timely consultation of another health professional as needed for optimal patient care
- 6.3. Recognize the type of case that, because of tissue type, rarity, complexity, or therapeutic implications, will require referral
- 6.4. Recommend appropriate follow-up care services for a patient or a patient's family, if required

Communicator

Definition:

As *Communicators*, General Pathologists effectively facilitate patient care through their role in the doctor-doctor and the doctor-patient relationship and the dynamic exchanges that occur before, during, and after the medical encounter.

Key and Enabling Competencies: General Pathologists are able to...

1. Develop rapport, trust, and ethical therapeutic relationships with patients and families

- 1.1. Recognize that being a good communicator is a core clinical skill for physicians
- 1.2. Establish appropriate communication with patients and their families when the situation arises
- 1.3. Respect patient confidentiality, privacy and autonomy
- 1.4. Facilitate a structured clinical encounter as required
- 1.5. Ensure appropriate communication with patients and/or family members with respect to handling of surgical and post-mortem procedures, including appropriate cultural sensitivity

2. Accurately elicit and synthesize relevant information and perspectives of patients and families, colleagues, and other professionals as appropriate

- 2.1. Gather information about a disease, and about a patient's beliefs, concerns, expectations and illness experience where relevant, such as in an autopsy situation
- 2.2. Seek out and synthesize relevant information from other sources, such as a patient's family, caregivers and other professionals

3. Convey relevant information and explanations accurately to patients and families, colleagues and other professionals

- 3.1. Deliver information to a patient and family, colleagues and other professionals in a professional manner and in such a way that it is understandable, encourages discussion and participation in decision-making
- 3.2. Communicate with clinical colleagues in order to assist in the interpretation of laboratory findings in the clinical context
- 3.3. Address challenging communication issues effectively, such as obtaining informed consent, delivering bad news, and addressing behavioural and/or communication issues in difficult situations

4. Develop a common understanding on issues, problems and plans with patients, families, and other professionals

- 4.1. Explore problems to be addressed from a patient encounter effectively, including the patient's context, responses, concerns, and preferences
- 4.2. Respect diversity and difference, including but not limited to the impact of gender, religion and cultural beliefs on decision-making
- 4.3. Encourage discussion, questions, and interaction in the encounter

5. Convey effective oral and written information about a medical case

- 5.1. Maintain clear, concise, accurate, and appropriate records of medical encounters and plans
 - 5.1.1. Demonstrate the ability to formulate comprehensive and clinically meaningful surgical pathology reports and organize diagnostic summaries to prioritize the features of importance. Diagnostic uncertainty must be clearly expressed with appropriate differential diagnoses and suggestions regarding further studies or ancillary investigations
 - 5.1.2. Demonstrate awareness of the importance of timeliness, clarity and accuracy in all verbal and written communication including critical results
- 5.2. Present verbal reports of clinical encounters and plans
- 5.3. Demonstrate understanding of the processes and potential roles of the General Pathologist surrounding communication with public or media regarding medical issues and events

Collaborator

Definition:

As *Collaborators*, General Pathologists effectively work within a health care team to achieve optimal patient care.

Enabling Competencies: General Pathologists are able to ...

1. Participate effectively and appropriately in an interprofessional health care team

- 1.1. Describe the General Pathologist's roles and responsibilities to other professionals
- 1.2. Describe the roles and responsibilities of other professionals within the health care team
- 1.3. Recognize and respect the diversity of roles, responsibilities and competencies of other professionals in relation to their own
- 1.4. Work with others to assess, plan, provide and integrate care for individuals and groups of patients

- 1.4.1. Provide consultative services to clinical colleagues regarding appropriate investigations and their interpretation
- 1.5. Work with others to assess, plan, provide and review other tasks, such as research problems, educational work, program review or administrative responsibilities
- 1.6. Participate in multidisciplinary team meetings
- 1.7. Enter into interdependent relationships with other professionals for the provision of quality care
- 1.8. Describe the principles of team dynamics
- 1.9. Respect team ethics, including confidentiality, resource allocation and professionalism
- 1.10. Demonstrate leadership in a health care team

2. Work with other health professionals to prevent, negotiate, and resolve conflict

- 2.1. Demonstrate a respectful attitude towards others
- 2.2. Work with others to prevent conflicts
- 2.3. Employ collaborative negotiation to resolve conflicts
- 2.4. Respect differences and address misunderstandings and limitations in other professionals
- 2.5. Recognize one's own differences, misunderstanding and limitations that may contribute to interprofessional tension

Manager

Definition:

As *Managers*, General Pathologists are integral participants in health care organizations, organizing sustainable practices, making decisions about allocating resources, and contributing to the effectiveness of the health care system.

Key and Enabling Competencies: General Pathologists are able to...

- 1. Participate in activities that contribute to the effectiveness of their health care organizations and systems
 - 1.1. Work collaboratively with others in their organizations
 - 1.2. Participate in systemic quality process evaluation and improvement, such as patient safety initiatives
 - 1.3. Demonstrate knowledge of laboratory safety, the transportation of dangerous goods, and all aspects of quality as defined by current International Standards Organization (ISO) standards for clinical laboratories and by provincial laboratory accreditation standards

- 1.4. Describe the structure and function of the health care system as it applies to laboratory medicine, including the roles of physicians, other health professionals, and administrative personnel
- 1.5. Describe principles of health care financing, including physician remuneration, budgeting, and organizational funding
- 1.6. Supervise and direct the clinical laboratory at the level of the community or regional hospital
- 1.7. Demonstrate an understanding of the role and structure of provincial and national hospital programs as they pertain to the role and utilization of the hospital laboratory, including but not limited to infection control, impact analysis, and blood supply and distribution
- 1.8. Participate in quality improvement initiatives or activities in all laboratory disciplines
- 1.9. Develop, adhere to and review quality control data

2. Manage their practice and career effectively

- 2.1. Set priorities and manage time to balance practice requirements, outside activities, and personal life
- 2.2. Manage a laboratory including:
 - 2.2.1. The supervision and direction of the clinical biochemistry, clinical microbiological, and hematopathology laboratory at the level of the community or regional hospital
 - 2.2.2. The direction of a hospital infection control program as it pertains to the role and utilization of the hospital laboratory
 - 2.2.3. The supervision and clinical direction of a transfusion service in association with provincial and national blood agencies
 - 2.2.4. The provision of consultation services regarding appropriate use of, and possible alternatives to, blood component therapy
 - 2.2.5. The management of staffing and personnel
 - 2.2.6. The supervision of budgeting (personnel, materials, capital equipment)
 - 2.2.7. The supervision of workload measurements
- 2.3. Participate in hospital medical staff organization
- 2.4. Demonstrate working knowledge of funding structures for laboratories
- 2.5. Demonstrate working knowledge of laboratory management
- 2.6. Demonstrate working knowledge of principles of optimal laboratory utilization
 - 2.6.1. The management of equipment purchasing and selection
- 2.7. Implement processes to ensure personal practice improvement
- 2.8. Employ information technology appropriately for patient care

- 2.8.1. Demonstrate working knowledge of laboratory information systems and components (hardware and software)
- 2.8.2. Demonstrate awareness of and comply with personal privacy legislation and policy
- 2.9. Describe an approach to evaluating emerging technologies with a view to the possibility of integration in the laboratory

3. Allocate finite health care resources appropriately

- 3.1. Recognize the importance of just allocation of health care resources, balancing effectiveness, efficiency, and access with optimal patient care
- 3.2. Apply evidence and management processes for cost-appropriate care

4. Serve in administration and leadership roles, as appropriate

- 4.1. Chair or participate effectively in committees and meetings
- 4.2. Lead or implement change in health care
- 4.3. Plan relevant elements of health care delivery (e.g., work schedules)

Health Advocate

Definition:

As *Health Advocates*, General Pathologists responsibly use their expertise and influence to advance the health and well-being of individual patients, communities, and populations.

Key and Enabling Competencies: General Pathologists are able to...

1. Respond to individual patient health needs and issues as part of patient care

- 1.1. Identify the role of laboratories regarding the health needs of individual patients
- 1.2. Identify opportunities for advocacy, health promotion, and disease prevention for individuals to whom they provide care

2. Respond to the health needs of the communities that they serve

- 2.1. Describe the practice communities that they serve
- 2.2. Identify opportunities for advocacy, health promotion, and disease prevention in the communities that they serve, and respond appropriately
 - 2.2.1. Respond adequately to community and hospital service demands, including but not limited to the need for population screening, detection, and control of infectious disease

- 2.2.2. Demonstrate the ability to recognize and respond to situations where health advocacy and application of health care resources is required, including the introduction of improved instrumentation and methodologies to augment community health care
- 2.2.3. Identify opportunities to advocate for appropriate infection control, blood product safety, reporting of communicable diseases, reporting of genetic diseases, genetic testing where appropriate, and public safety
- 2.3. Appreciate the possibility of competing interests between the communities served and other populations or organizations

3. Identify the determinants of health for the populations that they serve

- 3.1. Identify the determinants of health of the populations, including barriers to access to care and resources
- 3.2. Identify vulnerable or marginalized populations within those served and respond appropriately

4. Promote the health of individual patients, communities, and populations

- 4.1. Describe an approach to implementing a change in a determinant of health of the populations they serve
- 4.2. Describe how public policy impacts the health of the populations served
- 4.3. Identify points of influence in the health care system and its structure
- 4.4. Describe the ethical and professional issues inherent in health advocacy, including altruism, social justice, autonomy, integrity and idealism
- 4.5. Identify the possibility of conflict inherent in the role of health advocate for a patient or community with that of manager or gatekeeper
- 4.6. Describe the role of the medical profession in advocating collectively for health and patient safety

Scholar

Definition:

As *Scholars*, General Pathologists demonstrate a lifelong commitment to reflective learning, as well as the creation, dissemination, application and translation of medical knowledge.

Key and Enabling Competencies: General Pathologists are able to...

1. Maintain and enhance professional activities through ongoing learning

1.1. Describe the principles of maintenance of competence

- 1.2. Describe the principles and strategies for implementing a personal knowledge management system
- 1.3. Recognize and reflect on learning issues in practice
- 1.4. Pose an appropriate learning question
- 1.5. Incorporate quality improvement activities for continuing medical education
- 1.6. Access and interpret relevant evidence
- 1.7. Integrate new learning into practice
- 1.8. Evaluate the impact of any change in practice
- 1.9. Document the learning process in accordance with provincial or national guidelines

2. Critically evaluate medical information and its sources, and apply this appropriately to practice decisions

- 2.1. Describe the principles of critical appraisal
- 2.2. Critically appraise retrieved evidence in order to address a clinical question
- 2.3. Integrate critical appraisal conclusions into clinical care

3. Facilitate the learning of other health professionals, patients, families, students, residents, the public and others, as appropriate

- 3.1. Describe principles of learning relevant to medical education
- 3.2. Identify collaboratively the learning needs and desired learning outcomes of others
- 3.3. Select effective teaching strategies and content to facilitate others' learning
- 3.4. Demonstrate an effective lecture or presentation
- 3.5. Assess and reflect on a teaching encounter
- 3.6. Provide effective feedback
- 3.7. Describe the principles of ethics with respect to teaching

4. Contribute to the development, dissemination, and translation of new knowledge and practices

- 4.1. Describe the principles of research and scholarly inquiry
- 4.2. Describe the principles of research ethics
- 4.3. Pose a scholarly question
- 4.4. Conduct a systematic search for evidence
- 4.5. Select and apply appropriate methods to address the question
- 4.6. Disseminate the findings of a study
- 4.7. Demonstrate knowledge of the principles of General Pathology through completion of a scholarly project related to General Pathology

Professional

Definition:

As *Professionals*, General Pathologists are committed to the health and well-being of individuals and society through ethical practice, profession-led regulation, and high personal standards of behaviour.

Key and Enabling Competencies: General Pathologists are able to...

1. Demonstrate a commitment to their patients, profession, and society through ethical practice

- 1.1. Exhibit appropriate professional behaviors in practice, including honesty, integrity, commitment, compassion, respect, and altruism
- 1.2. Demonstrate a commitment to delivering the highest quality care and maintenance of competence
- 1.3. Recognize and appropriately respond to ethical issues encountered in clinical laboratory practice
- 1.4. Recognize, declare and manage conflicts of interest
- 1.5. Recognize the principles and limits of patient confidentiality as defined by professional practice standards and the law
- 1.6. Maintain appropriate relations with patients, colleagues, other health professionals, and support staff

2. Demonstrate a commitment to their patients, profession and society through participation in profession-led regulation

- 2.1. Demonstrate knowledge of and an understanding of the professional, legal and ethical codes of practice, including:
 - 2.1.1. Relevant legislation and/or regulations governing the operation of laboratories, including issues of informed consent
 - 2.1.2. Local regulations regarding the reporting of deaths to the medical examiner or coroner
 - 2.1.3. Regulations regarding the conduct of forensic investigations
 - 2.1.4. Regulations regarding the reporting of infectious diseases to appropriate public health authorities
 - 2.1.5. Regulations regarding the reporting of all critical results to treating physicians
- 2.2. Fulfill the regulatory and legal obligations required of current practice
- 2.3. Demonstrate accountability to professional regulatory bodies

- 2.4. Demonstrate awareness of professional and institutional codes of conduct and respond appropriately to breaches in these codes
- 2.5. Participate in peer review

3. Demonstrate a commitment to physician health and sustainable practice

- 3.1. Balance personal and professional priorities to ensure personal health and a sustainable practice
- 3.2. Strive to heighten personal and professional awareness and insight
- 3.3. Recognize other professionals in need and respond appropriately

Revised - SSRC - June 2012

The document is to be reviewed by the Specialty Committee in General Pathology by December 30, 2013.