

### 2022 VERSION 1.0

Effective for residents who enter training on or after July 1, 2022.

#### DEFINITION

Neuropathology is the laboratory specialty concerned with the investigation and diagnosis of diseases of the central and peripheral nervous systems and of skeletal muscle.

#### **NEUROPATHOLOGY PRACTICE**

Neuropathologists provide diagnostic assessment for patients of all ages with conditions related to the neurologic and neuromuscular systems. This includes diseases of degenerative, genetic, infectious, inflammatory, metabolic, neoplastic, traumatic, and vascular etiologies. Neuropathologists also examine cases of sudden unexpected death or of a forensic nature.

Neuropathologists provide consultation on tissue specimens submitted to the laboratory by referring clinicians for the purposes of investigating and diagnosing the mechanisms of disease. They perform autopsies and obtain post-mortem specimens. Tissue and post-mortem specimens include samples from the central nervous system, the peripheral nervous system, and specialized tissues surrounding or related to the nervous system, including the meninges, blood vessels, skull, spine, and skeletal muscle. Neuropathologists perform gross and microscopic examinations of these specimens, and select and interpret ancillary laboratory techniques including histochemistry, immunohistochemistry, immunofluorescence, molecular pathology, and electron microscopy. They correlate their findings with clinical features and the results of other investigations and provide diagnostic reports that are used by the referring clinicians to formulate plans of care, which may include further investigation, treatment, and/or counselling regarding familial inheritance. As pertaining to autopsy, neuropathologists act as consultants to other pathologists and the legal system. Neuropathologists may also manage and supervise neuropathology technical laboratories.

Neuropathologists are members of the clinical neurosciences team, providing consultation to neurosurgeons, neurologists, and neuroradiologists and contributing to multidisciplinary meetings that address patient assessment and management. Neuropathologists work closely with laboratory staff to optimize specimen handling and reporting and may consult with other pathologists in their work.

Most neuropathologists in Canada practise in university-affiliated tertiary care centres due to the referral base of clinical neuroscience services, and the facility resources, technical expertise, and access to specialized diagnostic tools required for neuropathology practice. Neuropathologists may also practise in private or hospital offices, or coroner's or medical examiner's offices. Neuropathologists may develop specialized expertise in one of the five neuropathology practice: neuro-oncology; main areas of nerve and muscle; neurodegenerative disease; pediatric neuropathology; and forensic neuropathology.

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#### **NEUROPATHOLOGY COMPETENCIES**

#### **Medical Expert**

#### Definition:

As *Medical Experts*, neuropathologists integrate all of the CanMEDS Roles, applying medical knowledge, clinical skills, and professional attitudes in their provision of high-quality and safe patient-centred care. Medical Expert is the central physician Role in the CanMEDS Framework and defines the physician's clinical scope of practice.

#### Key and Enabling Competencies: Neuropathologists are able to...

#### 1. Practise medicine within their defined scope of practice and expertise

- 1.1. Demonstrate a commitment to high-quality care of their patients
- 1.2. Integrate the CanMEDS Intrinsic Roles into their practice of Neuropathology
- 1.3. Apply knowledge of the clinical and biomedical sciences relevant to Neuropathology
  - 1.3.1. Embryology and postnatal development of the nervous system
  - 1.3.2. Normal gross, microscopic, and ultrastructural anatomy; physiology; and biochemistry of the nervous system, surrounding structures, and skeletal muscle
  - 1.3.3. Gross, microscopic, and ultrastructural appearance of diseased tissues of the nervous system, surrounding structures, and skeletal muscle
  - 1.3.4. Cytologic appearance of normal and abnormal cells in cerebrospinal fluid (CSF)
  - 1.3.5. Cell biology, immunology, and the basic histopathological reactions that occur in disease states of the nervous system
  - 1.3.6. Clinical epidemiology of nervous system disorders
  - 1.3.7. Diagnostic neuroradiology modalities, techniques and applications, and the correlation of radiologic with pathologic findings
  - 1.3.8. Manifestations of systemic disease in the nervous system
  - 1.3.9. Inherited and acquired developmental anomalies, including malformations of the nervous system
  - 1.3.10. Inherited and acquired metabolic disorders, and the effects of toxins and nutrition on the nervous system
  - 1.3.11. Infectious diseases of the nervous system, including classification and staining characteristics
  - 1.3.12. Tumours of the nervous system, its coverings, and surrounding structures, including classification and modes of treatment and their sequelae
  - 1.3.13. Degenerative diseases of the nervous system and the molecular changes and genetic bases underlying these disorders
  - 1.3.14. Vascular disorders of the nervous system, including hypoxic-ischemic injury, hemorrhage, and abnormalities of the vasculature

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- 1.3.15. Pathophysiological effects of trauma to the head, neck, and spine and its effects on the nervous system, its coverings, and vascular supply, including the relevance of these to forensic pathology
- 1.3.16. Diseases of myelin, including inherited, inflammatory, toxic, and metabolic disorders
- 1.3.17. Diseases of the pituitary, including neoplastic, inflammatory, and developmental disorders
- 1.3.18. Inherited and acquired myopathies and dystrophies of skeletal muscle, and diseases of the neuromuscular junction
- 1.3.19. Tissue handling for diagnostic techniques, including:
  - 1.3.19.1. Tissue fixation, decalcification, processing, and routine histological staining
  - 1.3.19.2. The use and indications for different fixatives and specialized tissue preparation methods
  - 1.3.19.3. Ancillary diagnostic techniques and their application in diagnosis
    - 1.3.19.3.1. Special histochemical stains
    - 1.3.19.3.2. Immunohistochemistry and in situ hybridization (ISH), including fluorescent in situ hybridization (FISH)
    - 1.3.19.3.3. Immunofluorescence
    - 1.3.19.3.4. Molecular pathology, including cytogenetics
    - 1.3.19.3.5. Flow cytometry
    - 1.3.19.3.6. Electron microscopy
- 1.3.20. Relevant laws and regulations in relation to tissue retention and disposal
- 1.3.21. Principles of light microscopy, including polarization and dark field microscopy
- 1.3.22. Principles of digital photography, slide scanning, digital pathology, and telepathology
- 1.3.23. Principles and process of autopsy, including forensic autopsy
- 1.3.24. Laboratory quality control and assurance relevant to the practice of Neuropathology
- 1.3.25. Workplace safety as relevant to laboratory practice, including hazardous materials, safety procedures, and biosafety principles
- 1.4. Perform timely diagnostic assessments with recommendations that are presented in an organized manner
- 1.5. Carry out professional duties in the face of multiple competing demands
- 1.6. Recognize and respond to the complexity, uncertainty, and ambiguity inherent in neuropathology practice
  - 1.6.1. Demonstrate insight into their own limits of expertise

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1.6.2. Convey diagnostic uncertainty and recommend additional studies when needed

#### 2. Perform a clinicopathologic assessment of a case

- 2.1. Prioritize issues to be addressed in a diagnostic assessment
  - 2.1.1. Identify and address clinical and laboratory-based issues in the preanalytical, analytical, and post-analytical handling of a case
- 2.2. Gather information from the clinical assessment and the medical record, select appropriate investigations, and interpret their results for the purpose of diagnosis and management, disease prevention, and health promotion
  - 2.2.1. Gather information about the patient's presentation and clinical course
  - 2.2.2. Handle specimens appropriately
  - 2.2.3. Assess specimen adequacy
  - 2.2.4. Perform gross and microscopic pathological examination
  - 2.2.5. Use digital microscopy, including digitized and scanned slides
  - 2.2.6. Formulate a differential diagnosis
  - 2.2.7. Select appropriate sections for ancillary testing
  - 2.2.8. Select ancillary techniques judiciously in a resource-effective manner as needed for diagnostic assessment
    - 2.2.8.1. Histochemistry
    - 2.2.8.2. Immunohistochemistry
    - 2.2.8.3. Immunofluorescence
    - 2.2.8.4. Molecular tests and cytogenetics
    - 2.2.8.5. Microbiology
  - 2.2.9. Interpret ancillary tests
  - 2.2.10. Review imaging studies and reports, and correlate radiologic features with gross and microscopic findings
  - 2.2.11. Relate findings of diagnostic procedures to the clinical history, including pathological and molecular studies
  - 2.2.12. Establish a final diagnosis that integrates clinical, radiologic, and laboratory findings
- 2.3. Provide diagnostic and prognostic information to help clinicians establish goals of care in collaboration with patients and their families<sup>1</sup>, which may include slowing

<sup>&</sup>lt;sup>1</sup> Throughout this document, references to the patient's family are intended to include all those who are personally significant to the patient and are concerned with their care, including, according to the patient's circumstances, family members, partners, caregivers, legal guardians, and substitute decision-makers.

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disease progression, treating symptoms, achieving cure, improving function, and palliation

2.4. Contribute to a patient-centered management plan

### 3. Plan and perform tests and procedures for the purpose of diagnostic assessment and case management

- 3.1. Determine the most appropriate tests and procedures
- 3.2. Ensure appropriate consent has been obtained and documented for autopsies, genetic and other ancillary testing, and research
- 3.3. Prioritize a procedure or test, taking into account clinical urgency and available resources
  - 3.3.1. Prioritize ancillary investigations when specimen adequacy is limited
- 3.4. Perform procedures in a skilful and safe manner, adapting to unanticipated findings or changing clinical circumstances
  - 3.4.1. Perform appropriate dissection, description, and sampling of specimens for routine and ancillary procedures
  - 3.4.2. Prepare frozen sections, including imprint, smear and touch cytology specimens when relevant, and review for diagnosis
  - 3.4.3. Take high quality photomicrographs, digital images, and photographs of gross and microscopic specimens
  - 3.4.4. Perform post-mortem examinations of the nervous and neuromuscular systems (unfixed and fixed) in adult, pediatric, and perinatal patients, with full description, sampling, and diagnosis at gross and microscopic levels
  - 3.4.5. Perform forensic autopsies of the nervous system, including the skeletal and meningeal surroundings, as well as the major vascular supply
    - 3.4.5.1. Obtain samples for toxicology
    - 3.4.5.2. Submit specimens to the forensic sciences laboratory

### 4. Establish plans for ongoing case management and, when appropriate, timely consultation

- 4.1. Implement an action plan that supports ongoing case management, including follow-up on additional investigations, supplemental reporting, and further consultation as needed
  - 4.1.1. Ensure adequate follow-up is arranged when performing a diagnostic procedure or ordering a test
  - 4.1.2. Determine the need and timing of a referral to another specialist

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### 5. Actively contribute, as an individual and as a member of a team providing care, to the continuous improvement of health care quality and patient safety

- 5.1. Recognize and respond to harm from health care delivery, including patient safety incidents
  - 5.1.1. Resolve issues related to specimen misidentification and diagnostic errors
- 5.2. Adopt strategies that promote patient safety and address human and system factors
  - 5.2.1. Adhere to quality management processes throughout the pre-analytic, analytic, and post-analytic phase
  - 5.2.2. Apply safe practices in the laboratory, intraoperative consultation suite, and autopsy suite to minimize occupational risk

#### Communicator

#### **Definition:**

As *Communicators*, neuropathologists interact with patients, families, and other stakeholders to facilitate the gathering and sharing of essential information for effective delivery of service.

#### Key and Enabling Competencies: Neuropathologists are able to...

- 1. Establish professional relationships with patients, their families, and other stakeholders
  - 1.1. Communicate using an approach that encourages trust and is characterized by empathy, respect, and compassion
  - 1.2. Optimize the physical environment for the dignity and privacy of human tissue and deceased persons
  - 1.3. Recognize when the perspectives, values, or biases of patients, physicians, or other health care professionals may have an impact on the quality of services
    - 1.3.1. Ensure appropriate communication with patients and family members with respect to the handling of surgical and autopsy procedures and specimens, respecting culture and beliefs
  - 1.4. Manage disagreements and emotionally charged conversations
  - 1.5. Adapt to the unique needs and preferences of each case and the patient's clinical condition and circumstances
    - 1.5.1. Apply knowledge of cultural and religious accommodations in scheduling and selection of techniques for post-mortem examinations and forensic investigations, while ensuring that the death investigation is not compromised

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#### 2. Elicit and synthesize accurate and relevant information

2.1. Seek and synthesize relevant information from a variety of sources

# 3. Share health care information and plans with patients, families, and other stakeholders, including those involved in medico-legal investigations and legal proceedings

- 3.1. Share information and explanations that are clear, accurate, and timely, while checking for understanding
  - 3.1.1. Convey surgical pathology and autopsy findings clearly and compassionately
    - 3.1.1.1. Use plain language
    - 3.1.1.2. Convey the risk of inheritable diseases
    - 3.1.1.3. Demonstrate awareness of the most responsible physicianpatient relationship and the boundaries applicable to the neuropathologist's role
- 3.2. Disclose harmful patient safety incidents accurately and appropriately
  - 3.2.1. Communicate and document issues arising from a breach in quality or safety of laboratory practices

## 4. Document and share written and electronic information about the diagnostic assessment to optimize decision-making, patient safety, confidentiality, and privacy

- 4.1. Document the diagnostic assessment in an accurate, complete, timely, and accessible manner, in compliance with regulatory and legal requirements
  - 4.1.1. Maintain clear, accurate, and appropriate records of diagnostic examinations and results, including pertinent photographic documentation
  - 4.1.2. Prepare clear, concise, comprehensive, and timely written reports for surgical pathology and autopsy consultations
    - 4.1.2.1. Use synoptic reports and other standard report formats, as appropriate
    - 4.1.2.2. Integrate information from ancillary studies and other diagnostic sources into the pathology report
  - 4.1.3. Provide reports in a timely fashion, with appropriate documentation
  - 4.1.4. Communicate critical or unexpected results in a manner appropriate to their urgency
- 4.2. Communicate effectively using a written health record, electronic medical record, or other digital technology

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- 4.3. Share information with patients and others in a manner that enhances understanding and that respects patient privacy and confidentiality
  - 4.3.1. Communicate information appropriately, including evidence-informed opinions and conclusions, to law enforcement personnel, coroners or medical examiners, and lawyers

#### Collaborator

#### **Definition:**

As *Collaborators*, neuropathologists work effectively with other health care professionals to provide safe, high-quality, patient-centred care.

#### Key and Enabling Competencies: Neuropathologists are able to...

- 1. Work effectively with physicians and other colleagues in the health care professions
  - 1.1. Establish and maintain positive relationships with physicians and other colleagues in the health care professions to support relationship-centred collaborative care
  - 1.2. Negotiate overlapping and shared responsibilities with physicians and other colleagues in the health care professions in episodic and ongoing care
    - 1.2.1. Recognize and respect the diversity of roles, responsibilities, and competencies of other professionals in relation to their own
    - 1.2.2. Work effectively with laboratory technologists and pathology assistants, directing their assistance during specimen handling and autopsy procedures
    - 1.2.3. Work effectively with managers of technical staff
    - 1.2.4. Interact effectively with surgeons during intraoperative consultations
  - 1.3. Engage in respectful shared decision-making with physicians and other colleagues in the health care professions
    - 1.3.1. Advise clinical colleagues regarding procurement and handling of histologic and cytologic specimens
    - 1.3.2. Discuss indications for appropriate use of intraoperative and urgent consultations
    - 1.3.3. Convey information from the diagnostic assessment in a manner that enhances patient management
      - 1.3.3.1. Encourage discussion, questions, and interaction relevant to the case
      - 1.3.3.2. Convey diagnostic uncertainty and discuss deferral of diagnosis when needed
    - 1.3.4. Synthesize, present, and discuss cases effectively at multidisciplinary rounds

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### 2. Work with physicians and other colleagues in the health care professions to promote understanding, manage differences, and resolve conflicts

- 2.1. Show respect toward collaborators
- 2.2. Implement strategies to promote understanding, manage differences, and resolve conflict in a manner that supports a collaborative culture

### 3. Work with physicians and other colleagues in the health care professions to effectively enable continuity of case management

- 3.1. Determine when a case should be transferred to another pathologist with differing expertise
- **3.2.** Demonstrate safe handover of case management, using both oral and written communication as needed
  - 3.2.1. Handover incomplete assessments to another neuropathologist, if necessary, to ensure timely and expert completion of diagnostic reports

#### Leader

#### **Definition:**

As *Leaders*, neuropathologists engage with others to contribute to a vision of a high-quality health care system and take responsibility for the delivery of excellent patient care through their activities as clinicians, administrators, scholars, or teachers.

#### Key and Enabling Competencies: Neuropathologists are able to...

### 1. Contribute to the improvement of health care delivery in teams, organizations, and systems

- 1.1. Apply the science of quality improvement to systems of patient care
  - 1.1.1. Participate in systemic quality process evaluation, laboratory quality control, and quality improvement
    - 1.1.1.1. Apply knowledge of the methods of quality control and improvement in the neuropathology laboratory
    - 1.1.1.2. Apply knowledge of metrics and measurement systems used to track quality management and safety activities
    - 1.1.1.3. Apply knowledge of process improvement methodologies
    - 1.1.1.4. Ensure that laboratory practices and test selection are subject to quality control and evaluated on an ongoing basis in order to meet community needs
  - 1.1.2. Identify the role of Neuropathology in quality assurance of the overall health care system

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- 1.2. Contribute to a culture that promotes patient safety
- 1.3. Analyze patient safety incidents to enhance systems of care
  - 1.3.1. Contribute to the identification of quality management or safety problems in the neuropathology laboratory, the formulation and execution of a plan of action, and the assessment of that plan
- 1.4. Use health informatics to improve the quality of patient care and optimize patient safety

#### 2. Engage in the stewardship of health care resources

- 2.1. Allocate health care resources for optimal patient care
- 2.2. Apply evidence and management processes to achieve cost-appropriate care

#### 3. Demonstrate leadership in health care systems

- 3.1. Demonstrate leadership skills to enhance health care
  - 3.1.1. Apply knowledge of the structure and funding of the health care system as it relates to Neuropathology, including the roles of pathologists and other physicians
  - 3.1.2. Apply knowledge of the principles of laboratory management, including
    - 3.1.2.1. Resource allocation
    - 3.1.2.2. Workload measurement and assessment
    - 3.1.2.3. Collaboration with technical managers and hospital and laboratory administration
- 3.2. Facilitate change in health care to enhance services and outcomes
  - 3.2.1. Identify areas in which neuropathology services might be improved, and promote or implement changes to effect these improvements
  - 3.2.2. Evaluate the impact of any change in pathology practice by determining its impact on diagnostic accuracy and predictive value, and its usefulness to clinicians

## 4. Manage career planning, finances, and health human resources in personal practice(s)

- 4.1. Set priorities and manage time to integrate practice and personal life
- 4.2. Manage personal professional practice(s) and career
- 4.3. Implement processes to ensure personal practice improvement

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#### **Health Advocate**

#### **Definition:**

As *Health Advocates*, neuropathologists contribute their expertise and influence as they work with communities or patient populations to improve health. They work with those they serve to determine and understand needs, speak on behalf of others when required, and support the mobilization of resources to effect change.

#### Key and Enabling Competencies: Neuropathologists are able to...

- **1.** Respond to an individual patient's health needs by advocating with the patient within and beyond the clinical environment
  - 1.1. Work with patients to address determinants of health that affect them and their access to needed health services or resources
    - 1.1.1. Respond to individual patient diagnostic needs and concerns as part of case management
  - 1.2. Incorporate disease prevention, health promotion, and health surveillance into diagnostic assessments
    - 1.2.1. Describe the role of molecular methods used to screen for familial cancer syndromes
    - 1.2.2. Recognize and respond when a patient's diagnosis identifies that family members are at risk of an inheritable condition or are susceptible to environmental influences on disease

### 2. Respond to the needs of the communities or populations they serve by advocating with them for system-level change in a socially accountable manner

- 2.1. Work with a community or population to identify the determinants of health that affect them
  - 2.1.1. Identify the diagnostic laboratory needs of a community or population and their underlying basis
  - 2.1.2. Identify pathological findings and related laboratory results that have community and population relevance beyond that of the individual patient or patient's family
  - 2.1.3. Report to appropriate authorities or governmental organizations the results of pathological investigations that are relevant or important to the population
- 2.2. Improve clinical practice by applying a process of continuous quality improvement to disease prevention, health promotion, and health surveillance activities
- 2.3. Contribute to a process to improve health in the community or population they serve
  - 2.3.1. Advocate for adequate diagnostic facilities for the community or population they serve

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2.3.2. Engage with patient advocacy organizations and/or the public to raise awareness of the implications of pathology or forensic findings that have community or population relevance

#### Scholar

#### **Definition:**

As *Scholars*, neuropathologists demonstrate a lifelong commitment to excellence in practice through continuous learning, and by teaching others, evaluating evidence, and contributing to scholarship.

#### Key and Enabling Competencies: Neuropathologists are able to...

- 1. Engage in the continuous enhancement of their professional activities through ongoing learning
  - 1.1. Develop, implement, monitor, and revise a personal learning plan to enhance professional practice
    - 1.1.1. Create and implement a strategy to review recent literature in a systematic and feasible manner
    - 1.1.2. Create and implement a strategy to manage learned information
    - 1.1.3. Develop and implement a strategy to use updated information or knowledge in clinical practice
      - 1.1.3.1. Systematically employ updated information in the evaluation of tissue
      - 1.1.3.2. Systematically report updated information in pathology reports
  - 1.2. Identify opportunities for learning and improvement by regularly reflecting on and assessing their performance using various internal and external data sources
    - 1.2.1. Incorporate peer review as a source of information on personal performance
  - 1.3. Engage in collaborative learning to continuously improve personal practice and contribute to collective improvements in practice
    - 1.3.1. Participate in continuing medical education events, including regional, national, and international meetings

#### 2. Teach students, residents, the public, and other health care professionals

- 2.1. Recognize the influence of role modelling and the impact of the formal, informal, and hidden curriculum on learners
- 2.2. Promote a safe and respectful learning environment
  - 2.2.1. Apply knowledge of the roles and responsibilities of medical students and residents

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- 2.3. Ensure patient safety is maintained when learners are involved
- 2.4. Plan and deliver learning activities
  - 2.4.1. Work collaboratively with other health care professionals to identify the educational needs and anticipated learning outcomes of a medical audience
  - 2.4.2. Develop and select effective teaching strategies and content relevant to a medical audience
- 2.5. Provide feedback to enhance learning and performance
- 2.6. Assess and evaluate learners, teachers, and programs in an educationally appropriate manner

#### 3. Integrate best available evidence into practice

- 3.1. Recognize practice uncertainty and knowledge gaps in clinical and other professional encounters and generate focused questions that can address them
  - 3.1.1. Investigate questions that arise through participation in clinical rounds
- 3.2. Identify, select, and navigate pre-appraised resources
- 3.3. Critically evaluate the integrity, reliability, and applicability of health-related research and literature
  - 3.3.1. Record the results of literature review and retain them for future use
  - 3.3.2. Evaluate literature for its methodology, accuracy, importance, and scope
  - 3.3.3. Evaluate the impact of a change in pathology practice by determining its impact on diagnostic accuracy and predictive value, and its usefulness to clinicians
- 3.4. Integrate evidence into decision-making in their practice

### 4. Contribute to the creation and dissemination of knowledge and practices applicable to health

- 4.1. Demonstrate an understanding of the scientific principles of research and scholarly inquiry and the role of research evidence in health care
- 4.2. Identify ethical principles for research and incorporate them into obtaining informed consent, considering potential harms and benefits, and considering vulnerable populations
  - 4.2.1. Apply the principles of research ethics relevant to clinical studies and to tissue acquisition and use
- 4.3. Contribute to the work of a research program
  - 4.3.1. Identify, consult, and collaborate with content experts to conduct research

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- 4.3.2. Describe the neuropathologist's role in the identification, acquisition, and storage of tissue for research protocols and tissue banking
- 4.4. Pose questions amenable to scholarly investigation and select appropriate methods to address them
  - 4.4.1. Propose a methodological approach to solve the research question
  - 4.4.2. Conduct a systematic search for evidence based on a research question
  - 4.4.3. Identify areas for further research that flow from the results
- 4.5. Summarize and communicate to professional and lay audiences, including patients and their families, the findings of relevant research and scholarly inquiry
  - 4.5.1. Present information and educate the public about Neuropathology and issues related to Neuropathology
  - 4.5.2. Discuss relevant issues in Neuropathology with the larger community, including other health professionals, technical staff, learners, and those outside the health professions
    - 4.5.2.1. Respect the sensitivities of a diverse audience, the impact of gender, religion, and cultural beliefs on the information presented and the views expressed
    - 4.5.2.2. Encourage discussion, questions, and interactions in the encounter

#### Professional

#### Definition:

As *Professionals*, neuropathologists are committed to the health and well-being of individual patients and society through ethical practice, high personal standards of behaviour, accountability to the profession and society, physician-led regulation, and maintenance of personal health.

#### Key and Enabling Competencies: Neuropathologists are able to...

### 1. Demonstrate a commitment to patients by applying best practices and adhering to high ethical standards

- 1.1. Exhibit appropriate professional behaviours and relationships in all aspects of practice, demonstrating honesty, integrity, humility, commitment, compassion, respect, altruism, respect for diversity, and maintenance of confidentiality
- 1.2. Demonstrate a commitment to excellence in all aspects of practice
- 1.3. Recognize and respond to ethical issues encountered in practice
  - 1.3.1. Determine how to confront or manage ethical uncertainty when it conflicts with patient care
- 1.4. Recognize and manage conflicts of interest

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1.5. Exhibit professional behaviours in the use of technology-enabled communication

### 2. Demonstrate a commitment to society by recognizing and responding to societal expectations in health care

- 2.1. Demonstrate accountability to patients, society, and the profession by responding to societal expectations of physicians
- 2.2. Demonstrate a commitment to patient safety and quality improvement

## 3. Demonstrate a commitment to the profession by adhering to standards and participating in physician-led regulation

- 3.1. Fulfil and adhere to professional and ethical codes, standards of practice, and laws governing practice
  - 3.1.1. Apply knowledge regarding regulations for tissue submission to a laboratory and retention and disposal of tissue for research and education purposes
  - 3.1.2. Apply knowledge of the safe management, retention, and disposal of specimens with respect to biohazard concerns and diagnostic utility
  - 3.1.3. Identify and address ethical issues in organ and tissue retention
  - 3.1.4. Adhere to the principles and limits of patient confidentiality as defined by professional practice standards and the law
  - 3.1.5. Fulfil the requirements of the physician's duty to report, including communicable disease and suspected child, intimate partner, or elder abuse
  - 3.1.6. Describe the principles and practice of presenting evidence in a court of law, including what is admissible evidence, the nature of unfairly prejudicial evidence, and the difference between medical certainty and medical likelihood
- 3.2. Recognize and respond to unprofessional and unethical behaviours in physicians and other colleagues in the health care professions
- 3.3. Participate in peer assessment and standard setting
  - 3.3.1. Demonstrate a commitment to excellence in the discipline by participating in regular peer review

### 4. Demonstrate a commitment to physician health and well-being to foster optimal patient care

- 4.1. Exhibit self-awareness and manage influences on personal well-being and professional performance
  - 4.1.1. Demonstrate a commitment to safe practices in Neuropathology to minimize occupational risk

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- 4.2. Manage personal and professional demands for a sustainable practice throughout the physician life cycle
- 4.3. Promote a culture that recognizes, supports, and responds effectively to colleagues in need

This document is to be reviewed by the Specialty Committee in Neuropathology by January 31, 2024.

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