



McGill Anesthesia

Goals of the Residency Program

The goal of the McGill Anesthesia Residency Program is to train the candidate to become a competent specialist anesthesiologist, capable of assuming a consultant's role in the specialty.

The outline of the goals for the postgraduate program in Anesthesiology at McGill University conform to those objectives of training outlined in the green "General Information" booklet distributed by the Royal College of Physicians and Surgeons of Canada.

Definition

Anesthesiology is a medical specialty, which includes patient assessment and provision of life support and analgesia for surgical procedures and childbirth; assessment and management of critically ill patients; and the assessment and management of patients with acute and chronic pain.

Goals

The candidate must acquire a working knowledge of the theoretical basis of the specialty, including its foundations in the basic medical sciences and research.

Training must also encompass the provision of anesthesia services for all age groups in varied clinical situations. Performance must, therefore, reflect the anesthesiologist's knowledge of surgery, intensive care and resuscitation, the management of acute and chronic pain and includes assessment and provision of appropriate care of the mother and neonate in obstetrics.

The candidate must demonstrate a thorough knowledge of how perioperative management should be modified in the presence of concurrent medical problems.

Residents must demonstrate the knowledge, skills and attitudes relating to gender, culture and ethnicity pertinent to Anesthesia. In addition, all residents must demonstrate an ability to incorporate gender, cultural and ethnic perspectives in research methodology, data presentation and analysis.

CanMEDS Competencies

At the completion of training, the resident must exhibit the knowledge, skills and attitudes encompassed in the following competencies:

1. Medical Expert

General Requirements:

- Demonstrate diagnostic and therapeutic skills for ethical and effective patient care.
- Access and apply relevant information to clinical practice.
- Demonstrate effective consultation services with respect to patient care, education and legal opinions

Specific Requirements:

- Demonstrate knowledge of the basic sciences as applicable to anesthesia, including anatomy, physiology, pharmacology, biochemistry and physics.
- Demonstrate knowledge of general internal medicine with particular reference to the cardiovascular, respiratory, renal, hepatic, endocrine, hematologic and neurologic systems.
- Demonstrate knowledge of age-related variables in medicine as they apply to neonatal, pediatric, adult and geriatric patient care.
- Demonstrate knowledge of the principles and practice of anesthesia as they apply to patient support during surgery or obstetrics.
- Demonstrate clinical skills necessary for the basics of resuscitation and life support as practiced in critical care facilities.
- Demonstrate knowledge of the principles of management of patients with acute and chronic pain.
- Demonstrate knowledge of the role of the consultant anesthesiologist in the provision of safe anesthetic services within both community and teaching facilities.
- Demonstrate clinical skills necessary to the independent practice of anesthesia, including preoperative assessment, intraoperative support and postoperative management of patients of any physical status, all ages and for all commonly performed surgical and obstetrical procedures.
- Demonstrate clinical skills necessary to general internal medicine and intensive care including the ability to investigate, diagnose, and manage appropriately factors that influence a patient's medical and surgical care.
- Demonstrate competence in all technical procedures commonly employed in anesthetic practice, including airway management, cardiovascular resuscitation, patient monitoring and life support, general and regional anesthetic and analgesic techniques and postoperative care.
- Demonstrate knowledge of basic legal matters encountered in anesthetic practice including informed consent

These requirements are defined in detail in the "Goals and Objectives" rotation-specific document.

2. Communicator

General Requirements:

- Establish a therapeutic relationship with patients and families.
- Obtain and synthesize relevant history from patients and families
- Listen effectively.
- Discuss appropriate information with patients and families and other members of the healthcare team.

Specific Requirements:

- Demonstrate consideration and compassion in communicating with patients and families.
- Provide accurate information appropriate to the clinical situation.
- Communicate effectively with medical colleagues, nurses, and paramedical personnel in inpatient, outpatient, and operating room environments.
- Ensure adequate information has been provided to the patient prior to undertaking invasive procedures.
- Recognize that prior to provision of anesthetic care, specific medical intervention, elimination of risk factors, and genetic evaluation may be required.
- Demonstrate appropriate written communication skills while performing preoperative consultation.

3. Collaborator

General Requirements:

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

Specific Requirements:

- Demonstrate ability to function in the operating room environment using the full abilities of all team members.

4. Manager

General Requirements:

- Utilize personal resources effectively in order to balance patient care, continuing education, and personal activities.
- Allocate finite health care resources wisely.
- Work effectively and efficiently in a health care organization.
- Utilize information technology to optimize patient care and life-long learning.

Specific Requirements:

- Demonstrate knowledge of the role of operating room management committees.
- Demonstrate knowledge of the contributors to the cost of anesthetic care.
- Demonstrate knowledge of the guidelines concerning anesthetic practice and equipment in Canada.
- Record appropriate information for anesthetics and consultations provided.
- Demonstrate knowledge of quality assurance, and morbidity and mortality review.

5. Health Advocate

General Requirements:

- Identify the important determinants of health affecting patients.
- Contribute effectively to improved health of patients and communities.
- Recognize and respond to those issues where advocacy is appropriate.

Specific Requirements:

- Demonstrate a strategy to deal with situations where guidelines concerning anesthetic practice and equipment are not met.

6. Scholar

General Requirements:

- Develop, implement, and document a personal education strategy.
- Critically appraise sources of medical information.
- Facilitate learning of patients, students, and other health professionals.
- Contribute to the development of new knowledge.

Specific Requirements:

- Develop criteria for evaluating the anesthetic literature.
- Critically assess the literature using these criteria.
- Describe the principles of good research.
- Using these principles, judge whether a research project is properly designed.

7. Professional

General Requirements:

- Deliver highest quality care with integrity, honesty and compassion.
- Exhibit appropriate personal and interpersonal professional behaviors.
- Practice medicine ethically consistent with the obligations of a physician.

Specific Requirements:

- Periodically review his/her own personal and professional performance against national standards set for the specialty.
- Include the patient in discussions concerning appropriate diagnostic and management procedures.
- Respect the opinions of fellow consultants and referring physicians in the management of patient problems and be willing to provide means whereby differences of opinion can be discussed and resolved.
- Show recognition of limits of personal skill and knowledge by appropriately consulting other physicians and paramedical personnel when caring for the patient.
- Show a pattern of maintaining current personal clinical skill and knowledge through continuing medical education.

Terminal goal:

The goal of the McGill University Postgraduate Anesthesiology program is to incorporate the above goals into the program such that at the end of training the resident will demonstrate excellent skills related to data gathering, use of investigation, clinical judgment and performance of technical procedures. In brief, given a patient presenting for surgery, the resident will elicit a complete database from history and physical examination. Subsequently, appropriate laboratory tests should be chosen and interpreted correctly. Using this information an appropriate plan of anesthetic management will be developed. Further, given an emergency situation, the resident will demonstrate not only appropriate intervention but also appropriate speed of intervention.

The resident will demonstrate skills in performing technical procedures as outlined below.

The resident will:

- Establish venous access in central and peripheral veins. The resident will know the complications and indications associated with each means of venous access. The resident will perform central pressure monitoring using central venous pressure lines and pulmonary artery, thermodilution cardiac catheters. The resident will know the indications, contraindications, and complications of each approach.
- Establish arterial lines knowing the indications, contraindications, and complications of this procedure.
- Perform endotracheal intubation in the awake or the anaesthetized patient using the oral or nasal approach with both regular laryngoscopes and fiberoptic devices. The resident will know the indications, contraindications, and complications of each means of intubation.
- Perform spinal and epidural anesthesia knowing the indications, contraindications, and complications of each.
- Perform a variety of peripheral nerve blocks including those of the brachial plexus, cervical plexus blocks, and intercostal and lower extremity nerves. The resident will know the indications and contraindications for each block. The resident will be able to discuss the complications of each type of block.
- Perform resuscitations on patients of all age groups using the standards adopted in the B.C.L.S., A.C.L.S., A.T.L.S., and N.R.P. manuals.
- Be able to evaluate anesthetic machinery for safe usage.
- Be able to interpret correctly the data generated from all clinically used physiologic monitoring devices.