Elective: Anesthesia/Anesthesiology

OVERVIEW
The Anesthesia/Anesthesiology elective seeks to teach fundamental knowledge and skills that will enable you to deliver optimal care to patients in elective and emergent clinical situations. This elective is focused on clinical excellence, with sufficient flexibility to allow the resident to tailor the training to particular areas of interest in research, teaching, administration or clinical subspecialty. It is committed to producing high caliber Anesthesiologists while adhering to the philosophy that successful Anesthesiologists must first be well rounded clinicians.

Subspecialties include:
- Cardiac
- Obstetrical
- Acute Pain
- Chronic Pain
- Pediatrics

Skills include:
- Intravenous Cannulation
- Lumbar Puncture
- Mask Ventilation
- Orotracheal Intubation
- Drug Prep, admin and safety

INTRODUCTION

Location(s):
Health Science Centre (HSC)
St. Boniface General Hospital (SBGH)

Contact Person:
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LEARNING OBJECTIVES (CanMEDS)

By the end of this elective period the student shall:

- Be able to provide airway support
- Be able to gain airway access in most patients
- Be able to perform an adequate preoperative assessment in a healthy patient
- Be able to outline the options for anesthesia, and the general differences
- Be able to estimate fluid requirements and provide a rationale

For students considering a career in anesthesia, this elective will also provide the student with the capacity to:

- Be able to describe the daily activities that make up Anesthesia practice
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- Be able to outline the areas of skill and knowledge that are integral to Anesthesia practice
- Be able to summarize the advantages and disadvantages of Anesthesia for them as a career choice

**Medical Expert**

As Medical Experts, physicians integrate all of the CanMEDS Roles, applying medical knowledge, clinical skills and professional attitudes in their provision of patient-centered care.

- Pre-op assessment
- Optimization
- Intraoperative management
- Pain management and recovery

- Describe the principles of a preoperative assessment including an airway examination and apply this knowledge in a clinical setting.
- Discuss the principles of intravenous therapy and perform intravenous access on a patient using a sterile technique.
- Formulate a differential diagnosis of hypoxemia and describe the delivery of oxygen in the health care setting.
- Describe a basic general anesthetic technique and commonly used pharmacologic agents including their mechanism of action.
- Discuss the basic principles of airway management in the unconscious patient.
- Perform bag, mask ventilation and intubation of the trachea in a simulated environment and clinical setting.
- Formulate an approach for the management of acute pain and describe basic analgesic options including the World Health Organization Pain Ladder.

**Communicator**

Physicians effectively facilitate the doctor-patient relationship and the dynamic exchanges that occur before, during, and after the medical encounter.

- Establish rapport, trust and a therapeutic relationship with patients and families
- Listen effectively
- Elicit relevant information and perspectives of patients, families, and the health care team
- Convey relevant information and explanations to patients, families and the health care team
- Convey effective oral and written information about a medical encounter
- Maintain clear, accurate, appropriate, and timely records of clinical encounters/ operative procedures
- Address challenging communication issues effectively
- Obtain informed consent
- Disclose adverse events
- Addressing anger, confusion and misunderstanding using a patient centric approach

**Collaborator**

Physicians effectively work within a healthcare team to achieve optimal patient care.

- Demonstrate a team approach to health care
- Participate effectively in an inter-professional and interdisciplinary health care team
- Recognize and respect the diversity of roles, responsibilities, and competences of other health professionals in the management of the surgical patient
- Work with others to assess, plan, provide, and integrate care of the surgical patient
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Leader
Physicians 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.

- Employ information technology appropriately for patient care
- Allocate finite health care resources appropriately

Health Advocate
Physicians responsibly use their expertise and influence to advance the health and well-being of individual patients, communities and populations.

- Concern for the best interest of patients
- Identifying health needs of individual patients, and advocate for the patient, where appropriate
- Promote and participate in patient safety

Scholar
Physicians demonstrate a lifelong commitment to reflective learning, as well as the creation, dissemination, application and translation of medical knowledge.

- Demonstrate the ability for continuing self-learning
- Discuss the principles of general / medical physiology and the application of basic sciences to anesthesiology
- Demonstrate appropriate presentation skills, including formal and informal presentations
- Critically evaluate medical information and its sources and apply this appropriately to clinical decisions
- Critically appraise the evidence in order to address a clinical question
- Integrate critical appraisal conclusions into clinical care.

Professional
As Professionals, physicians are committed to the health and well-being of individuals and society through ethical practice, profession-Led regulation, and high personal standards of behaviour.

- Exhibit professional behaviors in practice, including honesty, integrity, commitment, compassion, respect and altruism
- Demonstrate a commitment to delivering the highest quality care
- Recognize and respond appropriately to ethical issues encountered in practice
- Recognize and respect patient confidentiality, privacy and autonomy
- Participation in peer review
- Manage conflicts of interest and maintain appropriate relations with patients
- Demonstrate awareness of industry influence on medical training and practice
- Recognition of personal and clinical limitations
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INFORMATION

Required Reading

- Morgan and Mikhail’s Clinical Anesthesiology, 5th Edition (McGraw Hill)
- Crisis Management in Anesthesiology (Elsevier)
- The Ottawa Anesthesia Primer (http://www.anesthesiaprimer.com/)

Evaluations

Students are required to have their logsheets filled in daily by their primary preceptor (faculty, fellow or resident).

An exit interview will be performed at the end of the rotation. At this meeting, the Undergraduate Site Director will review and logsheets and discuss the student’s performance during the elective. The Site Director will collate the information collected on the logsheets to complete the student’s final evaluation.

If there are any concerns regarding a student’s performance, a mid-rotation interview will be conducted.

Call Responsibilities

Call is not a mandatory part of the anesthesia elective. Students who would like to volunteer for a call shift must discuss this with the Anesthesia Site Coordinator and/or Senior anesthesia slating resident. All call shifts end at 22h00 in order for students to obtain adequate rest prior to regular scheduled assignments the next day.

Expectations

**U OF M AND CANADIAN MEDICAL SCHOOL STUDENTS:**

- A minimum of 2 weeks to a maximum of 4 weeks duration is suggested; approval is subject to availability.

**INTERNATIONAL MEDICAL SCHOOL STUDENTS:**

- Electives must be 2 weeks duration and are subject to availability.
- Prior experience in anesthesia is required before requesting an elective rotation.

WARD ACTIVITIES

Service Rounds

Daily OR assignments during which the student will work one-on-one with the anesthesiologist or the resident/fellow.

Students should review the slate and the patient charts the day before and contact the attending anesthesiologist to discuss the cases in preparation for the next day’s slate.
Academic Schedule

Attendance at academic half day on Wednesday mornings; Anesthesia Grand Rounds at 0745 and Anesthesia Resident Seminar at 0900. A schedule for the academic half days is provided at the rotation orientation.