ANESTHESIA / ANESTHESIOLOGY

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.
- Prior experience in anesthesia (2 weeks) is required before requesting an elective rotation.

INTERNATIONAL MEDICAL SCHOOL STUDENTS:
- Electives must be 2 weeks duration and are subject to availability.
- Prior experience in anesthesia (2 weeks) is required before requesting an elective rotation.

CONTENT
1. Daily OR assignments during which the student will work one-on-one with the anesthesiologist or the resident / fellow.
2. 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.
3. 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.
4. Electives sites are at Health Sciences Centre (HSC) and at St. Boniface General Hospital (SBGH).

Areas of subspecialty experience are:

<table>
<thead>
<tr>
<th>Subspecialty</th>
<th>Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiac</td>
<td>SBGH</td>
</tr>
<tr>
<td>Obstetrical</td>
<td>HSC &amp; SBGH</td>
</tr>
<tr>
<td>Acute Pain</td>
<td>HSC</td>
</tr>
<tr>
<td>Chronic Pain</td>
<td>HSC</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>Children’s</td>
</tr>
</tbody>
</table>

All electives must begin with at least one week in one of the non-subspecialty areas.

CALL RESPONSIBILITY
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.

ORIENTATION
The student will meet with the Anesthesia Undergraduate Program Assistant on the first day of their elective to review the forms and expectations of the rotation.

STUDENT EVALUATION
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.
MISSION STATEMENT: UNDERGRADUATE ANESTHESIA PROGRAM
To teach fundamental knowledge and skills that will enable you to deliver optimal care to patients in elective and emergent clinical situations.

EDUCATIONAL OBJECTIVES OF ANESTHESIOLOGY ELECTIVE
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
- 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
The student will understand the anesthesiologist’s role in the perioperative management of the surgical patient, as it applies to:
- 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

TECHNICAL SKILLS
- Intravenous cannulation
- Lumbar puncture
- Mask ventilation
- Orotracheal intubation
- Drug prep, admin and safety
COMMUNICATOR
As Communicators, students will facilitate the doctor-patient relationship
- 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
As Collaborators, the students will work effectively within the anesthesiology and surgery 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

MANAGER
As Managers, students will participate in the activities of the anesthesiology service, making decisions, allocating resources, and contributing to the effectiveness of the health care team:
- Employ information technology appropriately for patient care
- Allocate finite health care resources appropriately

HEALTH ADVOCATE
As Health Advocates, students will 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
As Scholars, students will demonstrate a lifelong commitment to learning:
- 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, students are committed to health and well-being of individuals through ethical practice, profession-led regulation and high personal standards of behavior:

- 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

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

Any questions regarding the rotation or concerns that a student has while on the service can be directed to the Undergrad Site Director, the Undergrad Program Director or the Undergrad Program Assistant.

CONTACT
Anesthesia Undergraduate Program Assistant
Ingrid Heinrichs
iheinrichs@sbgh.mb.ca

Anesthesia Undergraduate Program Director
Dr. Marshall Tenenbein
Marshall.Tenenbein@umanitoba.ca