

# Anesthesia Elective/Rotation Manual -

2010-2011 -

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# Welcome -

Welcome to the Department of Anesthesia at the University of Ottawa. We hope that you have an enjoyable and informative rotation with us. This handout will give you some guidelines to get the most out of your stay.

As a medical student, you will be spending your time in the operating room with a resident and/or staff Anesthesiologist. You will be assigned to a different Anesthesiologist for each day of your elective/rotation. Requests to shadow specific Anesthesiologists may be accommodated depending on staff/O.R. availability. During your elective/rotation, you will be expected to work one evening call (until 10pm); you will be under the supervision of the on-call resident.

Dr. Nikhil Rastogi is the Undergraduate Director and site coordinator at the General campus. France Greenwood is the administrative assistant for the General campus' Department of Anesthesia and will conduct the General site orientation on the first day of your elective/rotation.

Julie Ghatalia is the site coordinator at the Civic campus. Julie is also the undergraduate coordinator for the Department of Anesthesia and will conduct the Civic site orientation on the first day of your elective/rotation.

If you have any questions, **Julie Ghatalia** (Undergraduate Coordinator) and **Dr. Nikhil Rastogi** (Undergraduate Director) will be your resource people. If they are not available, then Dr. Rob MacNeil should be your contact.

We hope you have an enjoyable and rewarding time with us in the Department of Anesthesia. If you feel there are any areas for improvement, please discuss them with Dr. Rastogi. Positive and negative feedback are welcome, to ensure the best possible rotation for future students.

Nikhil Rastogi, MD, FRCPC  
Undergraduate Director  
Department of Anesthesiology  
The Ottawa Hospital

# Learning Objectives -

## A. GENERAL OBJECTIVES

1. - To demonstrate an understanding of the anesthetic considerations for a variety of medical conditions and perform the appropriate/necessary preoperative assessment/preparation of the patient.
2. - To acquire the knowledge necessary to conduct appropriate fluid and blood component therapy
3. - To recognize and describe the main drug classes frequently used in the perioperative period
4. - To review and describe the principles of acute pain management
5. - To acquire basic skills in airway management

## B. SPECIFIC KNOWLEDGE AND SKILLS OBJECTIVES (expanded from general objectives)

1. - **To demonstrate an understanding of the anesthetic considerations for a variety of medical conditions and perform the appropriate/necessary preoperative assessment/preparation of the patient.**

**By the end of the rotation, the third year medical student will be able to perform a preoperative assessment as described in "Anesthesia for Medical Students, 2nd Ed." Specifically, the student will be able to:**

- A) Obtain and record a pertinent medical history
- B) -Perform a focused physical examination including assessment of the airway, the respiratory and cardiovascular systems, and other systems as indicated by the clinical situation
- C) -Interpret basic laboratory data and investigations relevant to the preoperative assessment
- D) Develop a problem list and assigning appropriate ASA physical status based on their patient assessment
- E) -Recommend appropriate pre-medication (e.g. anxiolytic, aspiration prophylaxis) and recognize which medications to hold preoperatively (e.g. anticoagulants, oral hypoglycemics)
- F) - State the recommended preoperative fasting guidelines, list the risk factors for perioperative aspiration and describe strategies to reduce this risk.

2. - **To acquire the knowledge necessary to conduct appropriate fluid and blood component therapy.**

**By the end of the rotation, the third year medical student will be able to:**

- A) Recognize and describe the physiologic and pathologic routes of fluid losses and be able to estimate these losses
- B) -Assess a patient's volume status using history, physical examination and laboratory investigations
- C) -Insert a peripheral intravenous catheter using the technique described in the Emergency Medicine Learning Module on the University of Ottawa website.
- D) Demonstrate an understanding of the composition of commonly available intravenous fluids by selecting appropriate perioperative fluid and electrolyte replacement while taking into account the patient's deficits, maintenance requirements, and ongoing losses.
- E) -State the indications and complications of the various blood products (PRBC's, FFP, platelets) and describe the factors influencing one's decision/threshold to administer blood product therapy.

3. - **To recognize and describe the main drug classes frequently used in the perioperative period.**

- A) - By the end of the rotation, the third year medical student will be able to describe the main therapeutic effects, side effects and contraindications of the following classes of medications as described in the text: Anesthesia for Medical Student, 2<sup>nd</sup> Edition. *The main examples of medications used in the different classes have been noted in parentheses.*
  - a. Benzodiazepines (midazolam, lorazepam)
  - b. Opioids (fentanyl, morphine, dilaudid, codeine, demerol)
  - c. Induction agents (propofol)
  - d. Inhalational agents (desflurane, sevoflurane)
  - e. Local anesthetics (lidocaine, bupivacaine)
  - f. Muscle relaxants (succinylcholine, rocuronium)
  - g. NSAIDS (ibuprofen, naproxen, celecoxib)
  - h. Vasoactive medications (ephedrine, neosynephrine)
  - i. Antiemetics (dexamethasone, ondansetron, prochlorperazine)
- B) The student will be able to differentiate the 2 classes of local anesthetics and state the maximum recommended doses for lidocaine and bupivacaine
- C) - The student will be able to recognize the signs and symptoms of local anesthetic toxicity and outline the initial management.

4. - **To review and describe the principles of acute pain management**

**By the end of the rotation, the third year medical student will be able to:**

- A) Explain the concept of multimodal analgesia
- B) Identify and describe a variety of modalities commonly used for pain control. Examples of these are: patient controlled analgesia (IV PCA), intrathecal (spinal) opioids, epidural infusions and peripheral nerve blockade.

5. - **To acquire basic skills in airway management**

**By the end of the rotation, the third year medical student will be able to demonstrate the ability to manage the airway and ventilation of an unconscious patient.**

**This will be demonstrated by the ability to:**

- A) Label the basic structures of the oropharyngeal and laryngo-tracheal anatomy
- B) -State the indications and complications of airway management by face mask, laryngeal mask and intubation
- C) -Identify the appropriate size of face masks, laryngeal masks, oral and nasal airways, laryngoscope blades, and endotracheal tubes
- D) Recognize upper airway obstruction and independently demonstrate appropriate use of face mask, oral and nasal airways, head positioning, jaw thrust and chin lift maneuvers
- E) Independently demonstrate bag-mask ventilation of an unconscious patient
- F) Successfully prepare appropriate equipment for intubation
- G) Position and intubate a patient with minimal supervisory intervention
- H) Correctly identify within 15 seconds those patients in whom endotracheal intubation was not successful
- I) - Recognize the need for intubation/controlled ventilation using a combination of clinical circumstances, physical signs and lab results

6. - **To participate in an emergency resuscitation and in so doing, to recognize the various roles that health care professionals play in such situations as assessed by the student's preceptor during a real or simulated emergency.**

**By the end of the rotation, the third year medical student will be able to:**

- A) Participate in a supportive role in an emergency resuscitative effort and demonstrate knowledge of the ABC approach
- B) -Demonstrate ability to apply monitoring equipment including ECG leads and BP cuff to a patient with minimal supervisory intervention

# Elective/Rotation Details -

## Important Points:

- Please be prompt. You will be expected in the O.R. by 7:30 am.
- You will be expected to see in-patients on the afternoon before their surgery. Please see the section **O.R. Schedule** (pg. 7-9) for more details.
- You are expected to attend Grand Rounds during your rotation. Please see the section **Rounds** (pg. 11) for more details.
- On **Mondays, Wednesdays and Fridays**, Julie will be in her office at the University of Ottawa Skills and Simulation Centre. She can still be reached at [uganesthesia@toh.on.ca](mailto:uganesthesia@toh.on.ca). Julie will spend from **7:30am to 8:30am** on those days in her Anesthesia Undergraduate office (B302) before departing to the Centre. On **Tuesdays and Thursdays**, Julie will be situated in her Undergraduate office (B302) from **7:30am to 3:30pm** and can be reached at (613) 798-5555 ext. 17886.

## First Day:

- If you are at the **General campus**, please report to France Greenwood's office (Critical Care Wing, rm. 1401) by 7:30am. She will provide you with a locker, the change room access code, the call schedule and evaluation cards. You will also receive a brief orientation to the O.R. by one of the Anesthesiology residents.
- If you are at the **Civic campus**, please report to Julie Ghatalia's office (Main Building, rm. B302) by 7:30am. She will provide you with a locker, the change room access code, the call schedule and evaluation cards. You will also receive a brief orientation to the O.R. by one of the Anesthesiology residents.

## Daily Routine:

- 07:40 am
  - Arrive in OR (in greens)
  - Set up IV bag/tubing
  - See first patient, do a focused Hx and PE
  - PMHx, Meds, Allergies

- Personal and family anesthetic history
- Airway assessment, auscultation heart/lungs
- Review patient with anesthesiologist
  
- 08:00 am
  - First case surgical start time

Daily Routine (continued):

- 3:30 pm
  - Usual finish time for O.R.
  - Check O.R. schedule for next day
  - 90% of patients come to hospital on morning of surgery (assessed weeks before in PAU clinic)
  - If any of your patients are in hospital the day before, do a pre-operative visit on the ward and try to touch base with the staff you are scheduled to work with next day

Illness:

- **Civic:** In the event that you become ill during your rotation, please notify **Judy Dureau** (Scheduling Coordinator) at (613)-761-4576 as soon as you realize that you will be unable to work. Once you are able to return to work, please call Judy (preferably before 12:00 pm) so that you will be included in the schedule for the following day.
  
- **General:** In the event that you become ill during your rotation, please notify **France Greenwood** at (613)-737-8187 as soon as you realize that you will be unable to work. Once you are able to return to work, please call France (preferably before 12:00 pm) so that you will be included in the schedule for the following day.

# O.R. Schedule/Activities -

## Civic:

The O.R. day starts at 7:30 am every day except Wednesday, when it starts at 8:00am to accommodate Grand Rounds.

If you are assigned to the Riverside hospital, please report to the O.R. desk at the Riverside Campus main level at 7:30 am. You will receive your room assignment and a locker key. Present yourself to the Anesthesiologist in the O.R. by 7:45 am. On days of rounds (Wednesdays), you should attend the rounds at the Civic and speak to Julie about transportation to the Riverside (either the hospital shuttle or a staff member).

At the end of the day, you may look up your next day's room assignment. At the Civic Campus, a list of the next day's schedule is available in the Anesthesia Lounge at approximately 2:00 pm. The frontsheet and the full OR schedule will be posted here. If the schedule is not posted you may call the Main O.R. desk at 613-798-5555, ext 14724. At the Riverside campus, a list of the next day's schedule (Riverside + Civic) will be available at the OR clerk's station (613-738-8400, ext 88496).

There are several categories of patients which are listed on the schedule:

Patients with a ward (e.g. A-3) or TCI (to come in) beside their name are inpatients, and should be seen by you pre-op. If possible, try to be accompanied by the staff with whom you will be doing the case, but logistically that may be difficult to arrange. The purpose of this visit is to provide you with the opportunity to practice your focused anesthesia history, physical (including airway assessment) and lab assessment. See Chapters 3 and 6 in the text. Inpatients are usually more complex, so familiarizing yourself with their pathology will increase your learning. Also, it provides an opportunity for the patient to meet you.

"SDCS" and "SDCS-ON" are daycare patients, who come in on the morning of surgery and go home the same day or first thing the next morning.

"SDA" means that they are admitted on the day of their surgery and will have been seen by an anesthesiologist at an earlier date in the Pre-Assessment Unit (PAU). These patients are not in hospital, so need not be seen pre-op. It is suggested that you review their charts the day before their surgery by visiting the PAU on E1.

Civic (continued):

By arriving prior to the beginning of the case, you will be able to discuss the anesthetic plan with your staff person and help prepare the O.R. for the first case.

Long operative procedures will provide you with an opportunity to discuss questions with your staff. If you are a third year medical student doing your mandatory two week anesthesia rotation, please bring your discussion topic list (green card) to the O.R. with you. Show the list to your staff to make sure that you are meeting your learning objectives. Chapter 25 in the recommended text has review questions to evaluate whether or not you understand the material. There is frequently time for reading during long cases, so if there is a slow period, discuss some library time with your staff. Make sure you agree what time you should return for participation in the O.R. activities or discussion of the topic that you have read about. There is a library on B3 (Room 301) so that the staff can call you back if need be. The keypunch code for entry to this room is 2020.

General:

The O.R. day starts at 7:30 am every day except Wednesday, when it starts at 8:30am to accommodate Grand Rounds.

At the end of the day, you may look up your next day's room assignment. A list of the next day's schedule is available at the operating room front desk and the Anesthesia office (CCW1401) at approximately 3:00 pm. The frontsheet and the full OR schedule will be posted here. If you are at the Civic campus for a teaching session, the next day's General frontsheet/cases will be available in the Anesthesia Lounge (B304) at approximately 3:00pm.

There are several categories of patients which are listed on the schedule: Patients with a ward (e.g. A-3) or TCI (to come in) beside their name are inpatients, and should be seen by you pre-op. If possible, try to be accompanied by the staff with whom you will be doing the case, but logistically that may be difficult to arrange. The purpose of this visit is to provide you with the opportunity to practice your focused anesthesia history, physical (including airway assessment) and lab assessment. See Chapters 3 and 6 in the text. Inpatients are usually more complex, so familiarizing yourself with their pathology will increase your learning. Also, it provides an opportunity for the patient to meet you.

"SDCS" are daycare patients, who come in on the morning of surgery and go home the same day or the next morning.

"SDA" means that they are admitted on the day of their surgery and will have been seen by an anesthesiologist at an earlier date in the Pre-Assessment Unit (PAU). These patients are not in hospital, so need not be seen pre-op.

General (continued):

You should be in the O.R. between 7:30 and 7:40. By arriving prior to the beginning of the case, you will be able to discuss the anesthetic plan with your staff person and help prepare the O.R. for the first case.

Long operative procedures will provide you with an opportunity to discuss questions with your staff. If you are a third year medical student doing your mandatory two week anesthesia rotation, please bring your discussion topic list (green card) to the O.R. with you. Show the list to your staff to make sure that you are meeting your learning objectives. Chapter 25 in the recommended text has review questions to evaluate whether or not you understand the material. There is frequently time for reading during long cases, so if there is a slow period, discuss some library time with your staff. Make sure you agree what time you should return for participation in the O.R. activities or discussion of the topic that you have read about.

# On-Call Schedule -

## Civic:

You will be scheduled to **work one evening per elective/rotation** from 16:00 to approximately 22:00 hrs. You will be expected to work the next day, so you should judge how late to stay based on the nature of the cases booked for that evening. You will not be expected to work on weekends. You will be booked in an OR from 7:30am-3:30pm the day of your call shift. When you arrive in OR8 for your call shift (4pm), please introduce yourself to the "A" resident on call. You may either spend your time with the resident or the staff, depending on the cases booked. The purpose of working in the evening is to give you some exposure to anesthesia for emergency surgery. The resident also covers the Case Room, Emergency Room, trauma codes, arrest team, etc. so following them can be quite informative.

## General:

You will be scheduled to **work one evening per elective/rotation** from 16:00 to approximately 22:00 hrs. You will be expected to work the next day, so you should judge how late to stay based on the nature of the cases booked for that evening. You will not be expected to work on weekends, although if you wish to have additional emergency experience this can be arranged. You will be booked in an OR from 7:30am-3:30pm the day of your call shift. When you arrive for your call shift, contact the resident on call. You may either spend your time with the resident or the staff, depending on the cases booked. The purpose of working in the evening is to give you some exposure to anesthesia for emergency surgery. The resident also covers the Case Room, Emergency Room, trauma codes, arrest team, etc. so following them can be quite informative.

# Rounds -

## Civic:

Grand Rounds are held mid-September to mid-May. They are held on Wednesday mornings (7:15-8:00 am) in the Bickell Conference Room (near the hospital's Main Entrance). The topic for Wednesday rounds is posted on the lounge room (B304) door.

## General:

Rounds are held mid-September to mid-May. Resident Case Rounds are held on Tuesday mornings at 7:00 am by a staff anesthesiologist, usually in the Anesthesia Conference Room (Room 2501). Interesting anesthesia problems are discussed informally, with input from medical students and residents. Grand Rounds are held on Wednesday mornings (7:15-8:00 am) in the Conference Room 2501.

**\*\*All rounds cancelled during the summer months (July-August)\*\***

# Lecture Series/Textbook -

## Lecture Series:

A collection of voice-over, Power Point lectures can be found in the Anesthesia Department library/computer room. The lectures are on the computers and can also be accessed from the internet (available on anesthesia.org and One45). The lecture series was specifically made for 3<sup>rd</sup> year medical students with your learning objectives in mind. You are expected to go over these lectures over the course of your rotation. If there is a “lull” during a longer surgical case, you may ask to be excused from the O.R. to do so. Alternatively, your staff anesthesiologist may suggest that you go review them at some appropriate point in the day.

There are 7 lectures with a total lecture time of 6 hours:

- Pre-operative assessment
- Induction/maintenance of anesthesia
- Hemodynamic changes during anesthesia
- Pharmacology
- Perioperative complications
- Acute pain management
- Video on laryngoscopy (optional)

If you experiences problems accessing the lectures please notify France (General) or Julie (Civic) as soon as possible if you are still unable to access the lectures.

## Textbook:

The reference texts for this rotation are **Anesthesia for Medical Students** by Dr. Pat Sullivan (this text is out of print and no longer available in the bookstore) and **A Brief Introduction to Anesthesia** edited by K. Raymer and R. Kolesar. Both texts are available to borrow from Julie (Civic) and France (General) for a \$25.00 deposit per book.

# Evaluations -

## Evaluations:

You will be provided with **daily evaluation cards (yellow)**, which should be given each day to the staff and/or resident with whom you are working. They will fill out the yellow cards and return them to **Dr. Nikhil Rastogi** (Undergraduate Director), who will complete the final evaluation based on the returned cards. For elective students, if you have an evaluation form to be filled out, please hand it in during the first week of your rotation.

You will be provided with **preceptor evaluation cards (elective students only)** in order for you to evaluate the assigned staff person for the day. Please fill these out daily and return them to **Julie Ghatalia** before the end of your rotation. University of Ottawa students must fill in the “evaluation of preceptor” form on One45. Student nominations (on One45 and the daily evaluation cards) are used for the annual undergraduate teaching award in the Department of Anesthesia. Significant concerns should be discussed with the undergraduate director.

Students must also fill out the **overall rotation evaluation (part A) and Anesthesia specific rotation evaluation form (part B)** on One45. Both completed forms must be submitted to Julie Ghatalia at the end of rotation meeting.

## Mid-Unit Evaluation:

Prior to receiving the mid-unit email, you should have achieved at least one of each procedure on the Anesthesia T-Clerk list. If your T-Log is incomplete, please notify Julie Ghatalia to assure adequate exposure by the end of the rotation. The email will also contain the assigned date and time for your end of rotation appointment.

## End of Rotation Meeting:

The end of rotation meeting will be with Julie Ghatalia. Prior to the appointment, **you must fill in the preceptor and rotation evaluations.** -

Please bring the following items to the meeting: -

- Copy of T-Log report
- Rotation evaluations
- Anesthesia for Medical Students text (if borrowed)

Exam:

There will be an **exam** at the end of your **twelve week block**. The Anesthesia component consists of twenty multiple choice questions and four CDM/LMCC-type (clinical decision-making) questions. The questions are based on the objectives provided, as well as the discussion topics card (green).

Feedback:

Preceptor feedback (regarding knowledge/skills) is usually given scattered throughout the day rather than a formal session at end. If you feel you have not received sufficient feedback, it is your responsibility to solicit it (take an active role in your learning!)

Ask about:

- What you've done well
- What you can improve upon and how

# T-Clerk Activities -

You must keep track of your learning activities on T-Clerk/T-Res, during your rotation. This is part of a nationwide, University-driven initiative to quantify the medical students' exposure during their clinical training. The info must also be entered into your own personal portfolio via your PDA and/or a web-based program.

Your T-Log must be submitted to **Julie Ghatalia** (Undergraduate Coordinator) at the end of your rotation. The completion and submission of your T-Log for the Anesthesia rotation is **mandatory**. Failure to record the rotation procedures and problems on the T-Clerk system will result in the **delay of your rotation evaluation** and the inclusion of a notation regarding **professionalism concerns**.

The following activities/experiences comprise the T-Clerk report for your Anesthesia Rotation:

TR018a – Trainee Goal Activities Count -- problems by rotation and procedures by rotation

Patient Encounter
Post-Operative Pain Management
Pre-Operative Assessment
Shock/Hypotension*

Procedure
Bag and Mask Ventilation
Intravenous (IV) Insertion
Intubation
Laryngeal Mask Insertion
Oral/Nasal Airway Insertion*
Oxygen (by Prongs/Face Mask)*
Rapid Sequence Induction

\*These experiences were covered in the simulator session and airway workshop components of the rotation orientation and may count towards the completion of your T-Logs.

# Electives -

## The Ottawa Hospital – General campus:

The Department of Anesthesiology at the Ottawa Hospital - General Campus offers elective experience to interested undergraduate medical students in their 2nd, 3rd and 4th years of training.

For the 2nd year student, one half-day per week for the period of a semester would be spent with one or two staff anesthesiologists. In addition to discussing the clinical aspects of anatomy, physiology and pharmacology as related to the practice of anesthesiology, the student will have opportunity to learn such clinical skills as IV solution preparation, IV insertion, patient monitoring and airway assessment/management, including endotracheal intubation.

For the 3rd and 4th year students, electives of 2 to 3 weeks duration are available. This is in addition to the mandatory rotation on the Anesthesiology service in the medical school curriculum. Emphasis will be directed toward developing a clearer understanding and appreciation of the specialty of Anesthesiology. The student will learn to perform a pre-anesthetic evaluation and learn how patient factors may influence the perioperative period. The student will acquire basic knowledge of the pharmacology of anesthetic agents and medications. He/she will become familiar with the anesthetic machine and breathing circuit, as well as the specialized anesthesiology monitors. By the end of the elective the student should be able to conduct, under supervision, a basic general anesthetic involving induction of anesthesiology, airway management, maintenance, emergence and recovery room care. The opportunity to learn regional anesthesiology, such as spinal blocks, will also be available.

**SITE COORDINATOR:** Dr. Nikhil Rastogi

**LOCATION:** General Campus - The Ottawa Hospital

**DURATION:** 2-3 weeks

**AVAILABLE FOR:** 2nd, 3rd and 4th year medical students

**CONTACT:** Julie Ghatalia (Undergraduate Coordinator) **PHONE:** (613) 798-5555 ext. 17886

**EMAIL:** [uganesthesia@ottawahospital.on.ca](mailto:uganesthesia@ottawahospital.on.ca)

**PLEASE NOTE: Students from other Canadian universities must submit the necessary paperwork to the University of Ottawa electives office ([elective@uottawa.ca](mailto:elective@uottawa.ca))**

The Ottawa Hospital – Civic campus:

The Department of Anesthesiology at the Ottawa Hospital - Civic Campus offers elective experience to interested undergraduate medical students in their 2nd, 3rd and 4th years of training.

For the 2nd year student, one half-day per week for the period of a semester would be spent with one or two staff anesthesiologists. In addition to discussing the clinical aspects of anatomy, physiology and pharmacology as related to the practice of anesthesiology, the student will have opportunity to learn such clinical skills as IV solution preparation, IV insertion, patient monitoring and airway assessment/management, including endotracheal intubation.

For the 3rd and 4th year students, electives of 2 to 3 weeks duration are available. This is in addition to the mandatory rotation on the Anesthesiology service in the medical school curriculum. Emphasis will be directed toward developing a clearer understanding and appreciation of the specialty of Anesthesiology. The student will learn to perform a pre-anesthetic evaluation and learn how patient factors may influence the perioperative period. The student will acquire basic knowledge of the pharmacology of anesthetic agents and medications. The student will become familiar with the anesthetic machine and breathing circuit, as well as the specialized anesthesiology monitors. By the end of the elective the student should be able to conduct, under supervision, a basic general anesthetic involving induction of anesthesiology, airway management, maintenance, emergence and recovery room care. The opportunity to learn regional anesthesiology, such as spinal blocks, will also be available.

**UNDERGRADUATE DIRECTOR:** Dr. Nikhil Rastogi

**LOCATION:** Civic Campus - The Ottawa Hospital

**DURATION:** 2 to 3 weeks

**AVAILABLE FOR:** 2nd, 3rd and 4th year medical students

**CONTACT:** Julie Ghatalia (Undergraduate Coordinator) **PHONE:** (613) 798-5555 ext. 17886

**EMAIL:** [uganesthesia@ottawahospital.on.ca](mailto:uganesthesia@ottawahospital.on.ca)

**PLEASE NOTE: Students from other Canadian universities must submit the necessary paperwork to the University of Ottawa electives office ([elective@uottawa.ca](mailto:elective@uottawa.ca))**

Children's Hospital of Eastern Ontario (CHEO):

Objectives:

- Learn the anatomy and management of the pediatric airway in the unconscious patient.
- Learn how to intubate the trachea.
- Learn vascular assess techniques.
- Learn about anesthesia pharmacology in children.
- Participate in the rounds and teaching sessions of the department.

Overview: -

This clinical elective is usually available only for students who have already completed a prior rotation in adult anesthesiology and must be recommended/approved by the Department Head or Coordinator in that adult department. -

Students will work with different staff members in the operating room and other areas where anesthesiology services are provided at CHEO. They will be given "hands-on" clinical experience under the direct supervision of staff members. The major emphasis is on the acquisition of useful clinical technical skills. -

They are expected to become familiar with the techniques and equipment used in the airway management of the unconscious patient, as well as acquiring skills in intravenous (and arterial) access. -

The student should become familiar with pre-operative assessment of children and appreciate the implications of co-existing disease or medications on anesthetic drugs and management. -

**SITE COORDINATOR:** Dr. Gould -

**LOCATION:** Children's Hospital of Eastern Ontario -

**DURATION:** 1 week (minimum) -

**NO. OF STUDENTS:** 1 -

**AVAILABLE FOR:** 3rd year medical students -

**CONTACT:** Jennifer Borup **EMAIL:** [jborup@cheo.on.ca](mailto:jborup@cheo.on.ca) -

**PLEASE NOTE: Students from other Canadian universities must submit the necessary paperwork to the University of Ottawa electives office ([elective@uottawa.ca](mailto:elective@uottawa.ca))**

# Contact Information -

## General:

<b>NAME</b>	<b>TITLE</b>	<b>PHONE</b>	<b>EMAIL</b>
Dr. Nikhil Rastogi	Director/Site Coordinator	N/A	nrastogi@toh.on.ca
France Greenwood	Admin. Assistant	(613) 737-8187	fgreenwood@toh.on.ca

## Civic:

<b>NAME</b>	<b>TITLE</b>	<b>PHONE</b>	<b>EMAIL @toh.on.ca</b>
Julie Ghatalia	Undergrad. Coordinator	(613) 798-5555 ext 17886	uganesthesia
Judy Dureau	Scheduling Coordinator	(613) 761-4576	jdureau

## CHEO: -

<b>NAME</b>	<b>TITLE</b>	<b>PHONE</b>	<b>EMAIL</b>
Dr. Marian Gould		N/A	mgould@cheo.on.ca
Jennifer Borup	Admin. Assistant	(613) 737-2431	jborup@cheo.on.ca

## University of Ottawa: -

<b>NAME</b>	<b>TITLE</b>	<b>PHONE 562-5800</b>	<b>EMAIL @uottawa.ca</b>
Denis Vadeboncoeur	Liaison Officer-Year3	ext 8131	medyear3
Julie Clavelle	Electives Coordinator	ext 8552	elective
Guylaine Renaud	Academic Advisor	ext 8427	grenaud
Christiane Raymond	Liaison Officer-Year4	ext 3808	medyear4

Websites: -

<b>TITLE</b>	<b>ADDRESS</b>
Undergrad. Medical Education	<a href="http://www.intermed.med.uottawa.ca/Students/MD/eng/">http://www.intermed.med.uottawa.ca/Students/MD/eng/</a>
Electives Catalogue	<a href="http://www.medicine.uottawa.ca/electives/eng/index.html">http://www.medicine.uottawa.ca/electives/eng/index.html</a>
One45 WebEval	<a href="http://www.one45.com/webeval/ottawa/">http://www.one45.com/webeval/ottawa/</a>
Dept. of Anesthesiology	<a href="http://www.anesthesia.org/index2.html">http://www.anesthesia.org/index2.html</a>
Anesthesiology Residency	<a href="http://www.ottawa-anesthesia.org/">http://www.ottawa-anesthesia.org/</a>