

Department of Anesthesiology

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Courses

ANESTH 8000 General Anesthesiology (Clinical Elective)

This clinical elective is designed to familiarize the student with basic aspects of anesthesiology practice. The primary teaching method is patient care in a clinical setting. The student will learn the basics of preoperative evaluation of surgical patients, the use of intraoperative monitoring inpatient management and postoperative care. In addition to perioperative care, the student will be exposed to other clinical areas which include our pain management clinic, regional anesthesia / acute pain management, cardiothoracic intensive care unit, labor and delivery, pediatric anesthesia, and the Center for Preoperative Assessment and Planning. During the four-week rotation, the student will learn airway management skills, basic IV skills, practical perioperative fluid and electrolyte therapy, along with general and regional anesthetic techniques. As an integral part of the anesthesia care team, the student will participate actively in the anesthetic management of surgical patients. The student's specific requests to be assigned to certain types of cases will be honored as time and availability dictate. The rotation will include at least one clinical simulator session using a simulator mannequin for practical management of airway problems.

Credit 4 units.

Typical periods offered: Medicine Year

ANESTH 8010 Cardiothoracic Anesthesiology (Clinical Elective)

This clinical elective offers practical experience in the perioperative assessment and management of surgical patients undergoing cardiothoracic procedures. The student, as an integral part of the cardiothoracic anesthesia team that is composed of faculty members, fellows and residents, will learn basic principles of airway management and lung ventilation, essential aspects of pharmacologic treatment of hemodynamic abnormalities and cardiac dysrhythmias, and management of intraoperative coagulation disturbances. Emphasis will be placed on the interpretation of intraoperative hemodynamic data, echocardiographic finding (TEE), and laboratory results. During this rotation, the student will also gain practical experience in endotracheal intubation as well as the placement of intravenous lines and invasive monitoring lines, including radial artery and pulmonary artery catheters. Students will learn how to use these parameters in clinical decision making during anesthesia. At the conclusion of the rotation, the student will have a better understanding of invasive monitoring and data interpretation, as well as a more systematic approach to the management of intra- and post-operative hemodynamic, pulmonary and coagulation abnormalities. The students are expected to attend the didactic sessions of CTA and the Department of Anesthesiology. A presentation will be assigned.

Credit 4 units.

Typical periods offered: Medicine Year

ANESTH 8015 Pediatric Anesthesiology (Clinical Elective)

This clinical elective is designed to teach the theory and practice of pediatric anesthesiology and pain management. It features individualized instruction with faculty who specialize in the perioperative care of pediatric patients. The elective consists of active participation with pediatric anesthesiologists at St. Louis Children's Hospital where you will have the opportunity to learn about pre-anesthetic assessment, the performance of routine anesthetics (which includes instruction and practice in pediatric airway skills), other technical skills such as intravenous line placement, and the management of patients in the post-anesthesia care unit (PACU). Students on this rotation will also have exposure to sedation and anesthesia for procedures outside of the operating rooms, and to subspecialties including cardiovascular anesthesia, neurosurgical anesthesia, and acute and chronic pediatric pain management.

Credit 2 units.

Typical periods offered: Medicine Year

ANESTH 8020 CTICU: Cardiothoracic Intensive Care Unit (Clinical Elective)

This clinical elective offers practical experience in the postoperative management of cardiothoracic patients. The student will be fully integrated into one of the intensive care teams and have the opportunity to contribute to the management of critically ill patients. Students will have the opportunity to follow specific patients over the course of their stay in the ICU, during which time they will gain insight into holistic management of patients with multi-organ dysfunction. The CTICU environment is both challenging and exciting. Students will gain unique insight into cardiorespiratory physiology and pharmacology which will be demonstrated at the patients' bedside, an invaluable and unforgettable learning experience. Students will have opportunities to learn and sometimes assist with procedures, such as central lines, chest tubes, bronchoscopy and pulmonary artery catheter insertion as well as bedside ultrasound including TTE and TEE. Principles of management and resuscitation of hemodynamically unstable patients following surgery will be emphasized as well as ventilator management. Students will also see and help manage patients with unique physiology such as those patients on ventricular assist devices, and on ECMO. We also have a very busy and heart and lung transplantation program at the hospital - all of these patients are cared for in the CTICU. At the conclusion of the rotation, the student will have a better understanding of shock, sepsis, multi-organ failure, organ system support and compassionate withdrawal of life support. In addition to bedside teaching, there will be informal teaching sessions on a wide variety of topics as well as teaching on interpreting hemodynamic data and waveforms, and cardiac echo exams. Students will be encouraged to present on their patient at morning rounds, during which constructive feedback and interactive teaching will occur. Medical students will be asked to present a short discussion on a topic of their choice. This should be a short 20 - 30 minute presentation followed by a discussion on the topic which will be moderated by the attending. Discuss the time and topic of choice with the attending of service.

Credit 4 units.

Typical periods offered: Medicine Year

ANESTH 8030 Pain Management (Clinical Elective)

Acute pain is the most common symptom of medical illness and is ubiquitous after major surgery. Chronic pain is the leading cause of worker disability. Severe pain afflicts most people with advanced cancer. Learning the fundamentals of pharmacologic, interventional, and multidisciplinary pain management is important for all areas of clinical medicine.

Credit 4 units.

Typical periods offered: Medicine Year

ANESTH 8040 Anesthesiology for Neurosurgery (Clinical Elective)

Students will help care for patients having challenging neurosurgical procedures. Students will become familiar with complex procedures, brain monitoring, cardiovascular support and airway management and will be exposed to all kinds of neurosurgical pathology. Student must be prepared to participate in the intricate anesthetic management of patients undergoing surgery in our novel intraoperative MRI rooms. For those interested, clinical research projects are ongoing and student participation is encouraged.

Credit 4 units.

Typical periods offered: Medicine Year

ANESTH 8050 Obstetrical Anesthesiology (Clinical Elective)

The medical students will learn the different analgesia/anesthetic options for the labor patient. They will also learn how the physiological adaptations of pregnancy influence anesthetic management. They will be actively involved in the parturient's management, i.e., starting an IV, placement of spinal, epidural or CSE (combined spinal epidural) anesthetics. They will also attend the OB anesthesia conferences and interview patients in labor (with an OB anesthesia attending).

Credit 2 units.

Typical periods offered: Medicine Year

ANESTH 9100 Anesthesiology Advanced Clinical Rotation (ACR)

This Advanced Clinical Rotation is similar to the General Anesthesiology elective in exposure to anesthesiology, but the level of participation and assessment is enhanced. The expectation is that the students act at the level of a Clinical Anesthesia Year 1 resident. Though a prior elective in anesthesia is not required, it is encouraged, if possible. Students will learn the basics of preoperative evaluation of surgical patients, the use of intraoperative monitoring in patient management, and postoperative care. In addition to perioperative care, they will be exposed to other clinical areas which include labor and delivery, pediatric anesthesia, and the Center for Preoperative Assessment and Planning. The students will interact with patients across all age ranges and demographics. During the four-week rotation, the student will learn airway management skills, practical perioperative fluid and electrolyte therapy, along with general and regional anesthetic techniques. As an integral part of the anesthesia care team, the student will participate actively in the anesthetic management of surgical patients. Grading will be based on competency of anesthesia skills such as preoperative evaluation, bag mask ventilation, intubation, vascular access, handoffs, postoperative pain orders, etc. The student's specific requests to be assigned to certain types of cases will be honored as time and availability dictate. The rotation will include clinical simulator sessions using a simulator mannequin for practical management of airway problems, resuscitation, and trauma emergencies as well as supplemental educational sessions covering relevant topics in anesthesiology.

Credit 4 units.

Typical periods offered: Medicine Year

ANESTH 9150 Surgical Critical Care Advanced Clinical Rotation (ACR)

The 4400 Surgical ICU provides an exciting and challenging opportunity to care for some of the sickest patients in the hospital. From acute trauma to complex organ transplants, the SICU offers incredible teaching and education about a variety of medical topics and conditions. The ACR SICU rotation integrates medical students into one of the two SICU teams, and each medical student, in conjunction with a resident, will care for 3-5 patients on the service. This entails, at minimum, examining the patient, gathering pertinent information (lab results, significant events, etc.), and presenting the patient on rounds. Working with the resident, medical students will develop a problem list, as well as an organized plan for their patients. They will then need to follow up on the execution of all determined labs/interventions/

consults, closely communicating with the residents, fellow, and attending throughout the shift, as well as presence for sign-outs each morning/evening at shift change. In addition, medical students will be expected to attend and participate in multiple educational conferences throughout the week/rotation, as well as sessions for skills such as line placement and ultrasound. This rotation takes place at the Barnes-Jewish Hospital 4400 ICU Surgical and Burn/Trauma Intensive Care Unit. This ICU takes care of patients from a variety of backgrounds, including general surgery, trauma/acute care surgery, transplant surgery, vascular surgery, urology, as well as medical ICU overflow patients. The Surgical ICU is divided into 2 teams, Red and Blue, with each covering up to 18 patients. Medical students will be assigned to either the blue or red critical care teams while on the SICU rotation.

Credit 4 units.

Typical periods offered: Medicine Year
