

Clerkship: Anesthesiology & Critical Care

Description

Welcome to the Anesthesiology and Critical Care Clerkship. Anesthesiology and Critical Care Medicine fall within the same continuum of clinical care. Anesthesiologists care for extremes in patient populations: the youngest and oldest, as well as the healthiest and sickest patients in the hospital. The clinical setting for these patients is the post-procedure recovery room, which is functionally an intensive care setting. When patients are critically ill, or require further monitoring postoperatively, they are admitted to an intensive care unit (e.g. MICU, SICU, Neurosurgical ICU, PICU, NICU, Burn ICU). Patients may also arrive to the OR from a critical care unit, which includes the Emergency Department.

The principles of evaluating respiratory functions, cardiovascular stability and pain management are central to patient care in both Anesthesiology and Critical Care. These topics are the focus of this clerkship whether the setting is the operating room, the recovery room or an ICU. The relationships between teams in the OR and the ICU settings are also central to patient care in and across all units. This clerkship provides an excellent opportunity for students to apply core concepts in pharmacology and physiology and to exercise interdisciplinary skills in structured but complex clinical environments.

Anesthesiology

We hope that you will find your rotation in anesthesia both instructive and enjoyable. The practice of anesthesia in a clinical setting provides a sense of immediacy that cannot be duplicated by group discussions or lectures. The experience also promotes independent thought and timely decision making in a rapidly changing environment. Patients (neonatal to geriatric) with a variety of disease states arrive in the operating room for either simple or complex procedures. Evaluation and implementation of their care are best taught by one on one teaching in the operating room, which provides the maximum opportunity for student participation.

Co-Director: Liang Shen, M.D.

Email: lis9128@med.cornell.edu

Co-Director: Danielle McCullough, M.D.

Email: dam2034@med.cornell.edu

Clerkship Coordinator: Jonathan Lee

Email: jol4015@med.cornell.edu

Critical Care

During this rotation, you will be assigned to work in an intensive care unit where you will be exposed to patients with a variety of critical illnesses. You will follow at least one patient that you will present on morning rounds and work closely with the team to manage their care. You will be exposed to various concepts in critical care including mechanical ventilation, circulatory physiology, and management of different forms of shock. Each afternoon all the students on the rotation will meet with a proctor for a case discussion. Please read the documents that are associated with the case discussion the day before the conference. You may have the opportunity

to observe procedures; please note you should not perform any procedures without direct supervision by an ICU team member. Given the rapidly changing environment and sometimes delicate situations that may arise in an ICU setting it is essential that you adhere to the highest standards of professional conduct in your dealings with patients, families and other members of the ICU team.

Co-Director: David Berlin, M.D.
Email: berlind@med.cornell.edu

Co-Director: Kapil Rajwani, M.D.
Email: kar9043@med.cornell.edu

Clerkship Coordinator: Carmen Checo
Email: can2006@med.cornell.edu

Learning Objectives:

By the end of the Anesthesiology & Critical Care Clerkship, the student will be able to:

- Describe the pathophysiology, epidemiology, etiology, clinical features, laboratory findings, imaging, pathology, and prognosis of diseases commonly encountered in Anesthesiology and Critical Care Medicine.
- Perform a complete and focused history and physical examination for patients in Anesthesiology and Critical Care Medicine.
- Identify the differential diagnosis and diagnostic approach to commonly presenting signs and symptoms in Anesthesiology and Critical Care Medicine.
- Interpret diagnostic and imaging tests for clinical cases commonly encountered in Anesthesiology and Critical Care Medicine.
- Demonstrate skills in diagnostic reasoning and clinical problem-solving, cognizant of ambiguity and uncertainty, and applying the skills of evidence-based medicine.
- Outline preventive and management strategies for clinical cases commonly encountered in Anesthesiology and Critical Care Medicine.
- Write complete and accurate clinical notes.
- Communicate effectively with patients, families, and the medical team.
- Identify contextual factors that affect care, including psychosocial determinants of health.
- Recognize the limits of one's knowledge and skills, seeking consultation with more experienced physicians or specialists when indicated.
- Apply the principles of patient safety, healthcare quality, and minimizing medical error.
- Identify and respond appropriately to urgencies and emergencies in Anesthesiology and Critical Care Medicine.
- Demonstrate a high level of responsibility, including attendance, reliability, accurate reporting, and personal comportment.
- Demonstrate a commitment to self-directed learning by engaging in self-improvement, accepting constructive criticism, and modifying behaviors appropriately.
- Demonstrate professional relationships with patients by establishing rapport, showing sensitivity to patient needs and perspectives, advocacy, and confidentiality.

- Demonstrate professional relationships with colleagues, the healthcare team and systems by showing respect for, and cooperation with, all colleagues, and by using medical records appropriately.
- Demonstrate acceptable operating room etiquette, including proper self-introduction to OR team, appropriate dress, and respectful demeanor.
- Assist in preparation of anesthesia equipment, including: anesthesia machine, pharmacologic agents, intravenous lines, and suction apparatus.
- Demonstrate basic skills of airway assessment and management, including mask ventilation, intubation, and Mallampatti score.
- Describe basic ventilator settings and adjustments for various clinical scenarios.
- Assign ASA classification and perform cardiac risk stratification.
- Assign pain score for a postop patient and pain management plan.