

# DEPARTMENT OF ANESTHESIOLOGY

The Department of Anesthesiology offers a comprehensive educational program for medical students. Attempting to tailor the program to the individual student's goals and objectives, the Department is extremely flexible as to duration and content. Most fourth year students participate in a one month experience. Third year students can elect a one or two week experience during their surgical core rotation. We strive to provide students with an understanding of how medical knowledge plus modern anesthetic and perioperative care contribute to the outcome of patients undergoing surgery. Secondary objectives include teaching basic airway techniques, fluid management, invasive monitoring capabilities, and regional anesthesia.

The medical students are assigned to work with an attending anesthesiologist each day. The students accompany the attending anesthesiologist in performing the preoperative assessments of patients and participate in the perioperative anesthetic care of the patients assigned to each anesthesia care team that day. Students attend the weekly Departmental Conferences and additionally receive regular dedicated didactic instruction.

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## **ANESTHESIOLOGY ELECTIVE**

**Course Director: Kenneth J. Freese, M.D.**

**Duration: 4 weeks**

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## **GOALS**

Understand the principles of pre-anesthetic evaluation, preparation, and anesthetic care, including history, physical examination, assessment of physiological state, categorization of anesthetic risk, and care throughout the perioperative period.

## **EDUCATIONAL OBJECTIVES**

By the completion of this rotation, the medical student will:

- A. Develop basic and advanced airway management skills.
- B. Demonstrate and understand local anesthetic pharmacology and participate in the conduct of regional anesthetics.
- C. Demonstrate and understand the principles of conduct of a general anesthetic by demonstrating:
  - Knowledge of the pharmacology of the major anesthetic agents including appropriate selection and use:
  - Knowledge of the basic physiology and interpretation of intraoperative monitoring including end-tidal CO<sub>2</sub>, oxygen saturation, arterial blood gas, pulmonary artery pressures and hemodynamic measurements.
  - Knowledge of and administration of appropriate perioperative fluid therapy.
  - Knowledge and demonstration of operating room safety.
- D. Demonstrate an understanding of the principles of post-anesthesia recovery care and participate in the conduct of that care including recognition of the common complications seen following an anesthetic:

### **Clinical Experience**

The medical student participates in pre-anesthetic evaluations, placement of monitors, conduction of anesthetic including induction, intubation, maintenance, emergence, and extubation, post anesthetic recovery care and follow-up. The medical student may also have opportunities to gain experience in regional anesthesia, and sub-specialty anesthesia areas such as pediatric, obstetric, thoracic, and neurosurgical anesthesia.

### **Suggested Reading**

Basics of Anesthesia by Robert Stoelting and Ronald Miller

### **Didactic Experience**

The medical student will be expected to participate in all departmental lectures and conferences.

### **EVALUATION METHOD**

100% clinical observation.

### **HOW TO APPLY**

If you are interested in applying, please call 516 572 - 5399 or visit us at [www.numc.edu](http://www.numc.edu).