Simulation and the Nurse Anesthesia Program

Our leading-edge, state-of-the-art simulation technology prepares future nurse anesthetists to provide safe, competent and high-quality patient care.

The simulated operating room features:
- An anesthesia machine and cart similar to those used in the operating rooms at the clinical sites
- State-of-the-art table and OR lights similar to a real OR
- A full suite of current medical equipment and supplies, including items used at Barnes-Jewish Hospital and St. Louis Children’s Hospital, such as Aleris IV pumps, Pyxis machines, bedside computers, and defibrillators

How are mannequins used?
The simulated OR features an adult mannequin that can:
- Physiologically respond to treatment and medications in real time
- Simulate an airway occlusion, pneumothorax, hemorrhage, or a variety of medical-surgical complications
- Be intubated, defibrillated, and anesthetized
- Respond to CPR
- Allow students to start an IV, place a Foley catheter or insert a chest tube

An obstetric mannequin simulates the birth of a baby, and another area of the simulator center contains several pediatric mannequins.
WHAT WILL STUDENTS LEARN?

The simulated operating room helps teach nurse anesthesia students how to:

- Administer anesthesia to a surgical patient
- Make critical decisions on diagnosis and management of complications
- Manage life-threatening anesthetic emergencies
- Make a differential diagnosis
- Collaborate within multidisciplinary health care teams
- Build leadership skills
- Communicate with family members
- In addition to the OR, nurse anesthesia students will perform procedures such as intubation and placement of arterial catheters, central lines, spinal, epidurals and peripheral nerve blocks using task trainers

SIMULATION SCENARIOS

Each week, students are given a simulation scenario prior to the start of their anesthetic lecture. They must then care for the anesthetized “patient” and manage any complications that occur.

The environment provides a great experience for the nurse anesthesia students to sharpen their decision-making and problem-solving skills in an environment where mistakes can occur without adverse consequences to the patient. As students learn from their experiences, they develop increased competence and confidence, ultimately enhancing their ability to provide exceptional patient care.