

## Promoting Patient Safety through Simulation

The Center for Experiential & Applied Learning (CEAL) promotes patient safety at Wake Forest Baptist Health by incorporating five varieties of simulation\* into our portfolio:

1. Human patient simulation which uses high-fidelity simulators— mannikins —that have breath sounds, an audible heartbeat, and pulse. In addition, each mannikin has a monitor that can display EKG, pulse oximeter, blood pressure, arterial wave forms, pulmonary artery wave forms, anesthetic gases, etc. Procedures can be performed on the mannikin such as bag-mask ventilation, intubation, defibrillation, chest tube placement, cricothyrotomy and more.
2. Virtual reality simulation that uses advanced computerized technology to allow students to learn or practice how to perform colonoscopy, bronchoscopy, laparoscopic surgery, intravenous line placement, ultrasound scanning, and other procedures.
3. Task trainer simulation that involves the use of products to learn or practice a specific skill such as intubation heads, central venous line chests, intraosseous line legs, male and female pelvic trainers, or umbilical artery cannulation trainers.
4. Computerized simulation uses computer programs that allow the student to practice decision making skills and specific knowledge sets such as Advanced Cardiac Life Support (ACLS) trainers.

\*CEAL's Standardized Patient program is so robust that it exists as its own entity alongside the Simulation Team. Standardized patient simulation involves the use of individuals trained to play the roles of patients, family members, or others to allow students or clinical professionals to practice physical exam skills, history taking skills, communication skills, and other exercises.