TEXAS TECH UNIVERSITY
HEALTH SCIENCES CENTER™

F. Marie Hall Sim*Life* Center

TTUHSC brings learning to life.

Clinical Simulation:

- The past decade has seen a rapid increase in the number of academic medical centers, hospitals and clinics that use simulation to train clinicians.
- Investigators at the Mount Sinai School of Medicine of New York University in New York City surveyed 134 emergency medicine residency programs in 2008 and found that 91 percent used some form of simulation in training.
- A study from Northwestern investigators reported on 92 residents who received simulation training in central venous catheter insertion. The rate of bloodstream infections from catheters the residents inserted in an adult intensive care unit decreased during a 32-month period to 0.50 per 1,000 catheter-days compared with 3.20 per 1,000 catheter-days before the training.
- Researchers in Denmark examined whether virtual reality training could improve residents' skills in performing laparoscopic surgery. Their study compared 11 residents trained with a virtual reality simulator with 10 who received standard training. The simulator-trained residents achieved a proficiency level equivalent to having performed between 20 and 50 procedures; the traditionally trained residents' proficiency level was equal to having performed fewer than five procedures.
- In 2006, the Federal Agency for Healthcare Research and Quality awarded $5 million in grants for 19 simulation research projects.

Source: The Journal of the American Medical Association

The F. Marie Hall Sim*Life* Center:

- The Sim***Life*** Center at the Texas Tech University Health Sciences Center is distinguished as a Center of Educational Excellence by Laerdal, one of the leading providers of emergency and patient care solutions in the world.
- At least 1,000 students from all health disciplines will have the opportunity to learn at The Sim***Life*** each year.
- The Sim***Life*** Center is 24,415 square feet and features multi-modality simulation instruction areas:
  - Primary and acute care
  - A standardized patient program
  - Simulation using advanced simulators and haptic devices
- 3D visualization alows students to explore and dissect the human body in a virtual environment.
- Haptic devices provide residents, advanced nurse practitioners and physicians the ability to practice advanced procedures such as colonoscopy, bronchoscopy, and laparoscopic skills.
- Advanced patient simulators have detectable blood pressure points, pupils that respond to light, and heart, lung and bowel sounds.
- Partial simulators, such as mannequin arms or torsos, allow students to focus on specific skills such as starting an IV or drawing blood.
- Within the 3D visualization environments, students can practice advanced procedures such as cardiac catheterization and colonoscopies.
- Trained actors called standardized patients help learners master communication and physical assessment skills.

Visit *www.ttuhsc.edu/simlife* for more information.

From here, it's possible.