

# MEDICAL INNOVATIONS

## Medical Education For The Future

(NAPSA)—A patient lies unconscious in a room prepped for emergency care. Doctors and nurses work diligently to revive the young victim, a car crash survivor, whose life is on the line. He has several internal injuries and the emergency team is doing everything it can to save him.

This could be a day in the life of the emergency room at Hartford Hospital, but in reality, these are physicians in training who are inside a simulated emergency room, working on a robot, or Sim-Man. And it is part of a greater push to come up with innovative, new ways to train surgeons.

Right now, residency programs have tomorrow's doctors shadow today's. Eventually, new surgeons must perform hands-on operations themselves, so it's important that they become experts in their field without "practicing" their skills on actual patients.

It is how this simulated emergency room came to be called the "Center for Education, Simulation and Innovation" (CESI). And it is part of one Connecticut hospital's quest to revamp the future of medical education.

Through CESI, Hartford Hospital is training surgeons the way the Federal Aviation Administration trains pilots: by using realistic, lifelike simulators.

Federal laws have—and continue—to limit the total number of hours residents and students can train, making it challenging to fit much-needed training into a



**A lifelike, fully responsive, computerized replica of the human body lets medical students, practicing doctors, first responders and other clinicians hone and perfect their craft without having to do so on actual humans.**

short amount of time. At CESI, surgeons in training perform frequent, safe, realistic, hands-on surgeries using high-definition simulators.

### **Training Tomorrow's Doctors Today**

Future emergency doctors learn critical, lifesaving skills inside one of CESI's replica ERs. There, realistic emergency scenarios come to life with a computer-driven, humanlike mannequin named Sim-Man. Doctors treat victims of car accidents, heart attacks, stroke and other traumas in this simulated environment, where they learn how to diagnose and treat patients quickly; a critical skill when time is of the essence.

Pediatricians in training learn how to treat premature newborns

in CESI's simulated ICU. Using a special infant mannequin, doctors can perfect their skills—learning to treat and help save a tiny life.

### **Doctors at the Controls of a Robot**

As robotic surgery becomes more and more common, it's more important than ever that doctors have a place to hone their skills. Because of that, centers such as CESI will become increasingly important.

Inside CESI, physicians who are just starting out can perfect their surgical skills at the controls of an actual surgical robot, and operate using a video game-like simulation. The simulator assesses the surgeon's performance, offering individualized feedback and guidance, letting each person know what she or he needs to work on.

### **Planning for the Future**

"CESI is part of Hartford Hospital's efforts to expand its clinical education and training, and is a natural extension of our nationally acclaimed surgery, training and robotic programs," said Dr. Steven Shichman, urologist at Hartford Hospital.

CESI does more than train future doctors. Renowned physicians like Dr. Shichman teach new procedures there, focusing on developing and demonstrating innovative techniques.

### **Learn More**

Learn more at [www.harthosp.org](http://www.harthosp.org) and (860) 545-5000.