Quick action by emergency medical technicians Elizabeth Snow (CAS'11) (left) and Alex Su (MET'11) helped save a life at Commencement's psychology department convocation ceremony.

VERNON DOUCETTE

Life Savers

Student EMTs tackle emergencies, big and small

ALEX SU'S FIRST shift as an emergency medical technician (EMT) was covering last spring's psychology department convocation at Walter Brown Arena. "I figured I'd just be handing out Band-Aids or something," says Su (MET'11). Turned out he faced something a little more serious.

During the ceremony, the father of a graduate collapsed on the concourse. Su and fellow EMT Elizabeth Snow (CAS'11) rushed over with their first aid kit, oxygen tank, and automated external defibrillator (AED). "I checked for a pulse and he didn't have one," recalls Su, a neuroscience major. "We immediately identified it as cardiac arrest."

Snow radioed for an ambulance while Su and a doctor who'd responded at the scene began CPR. When that failed, Snow fired up the AED and the physician applied the paddles. Within a minute, the man's pulse had returned and he began breathing on his own.

"Most of the stories I hear about people doing CPR usually end with the patient not making it," says Su, who took the EMT course at the University's Fitness and Recreation Center last year and recertified in January. "When we saw that he was going to make it, it was a pretty good feeling."

Su and Snow are two of thousands of EMTs trained at the University. Since being launched in 1999, the Emergency Response Education program has grown and now features two sections a semester plus a summer session, filled with high school students, undergrads, alumni, faculty, and staff, as well as students from Harvard and Tufts. In all, almost 300 students each year learn physiology, anatomy, patient interaction, and CPR, all on the road toward state EMT certification. Ambulance ride-alongs and emergency room observation are critical parts of the program, says Ray Levy, coordinator of Emergency Medical Services.

"Those are usually very eye-opening experiences, especially for the BU students, because we've taken them out of their safe zone and put them in a difficult, fast-paced environment," he says. "Some of them get really fascinated by it."

Many EMTs end up working for BU, covering events from concerts at Agganis Arena to BU Academy varsity games. The students are no strangers to more serious injuries, including one notable broomball accident where a player impaled his leg on a broom.

Su says that despite the extreme circumstances of his first shift, he never blinked.

"This was definitely a wake-up call," he says, "but I feel like the EMT instructors prepared me to do anything." CALEB DANILOFF

KALMAN ZABARSKY

Harlan Spence and a team of BU astronomers have been helping NASA astronauts prepare for the potential danger of solar radiation.

A Bit of BU Goes Moonbound

Astronomer's work launches with lunar orbiter

Half a century after Neil Armstrong's pioneering mission to the moon, NASA scientists are preparing to go back for a longer stay, with the help of a team of Boston University researchers. Led by Harlan Spence (CAS'83), a College of Arts & Sciences professor of astronomy, the group has been helping to prepare for the potential danger of exposure to solar radiation. When the rocket carrying NASA's Lunar Reconnaissance Orbiter (LRO) launched last June, their creation — part telescope, part synthetic human tissue — went up with it.

The instrument developed by Spence and company is called CRaTER (cosmic ray telescope for the effects of radiation), one of two LRO instruments responsible for collecting data on the moon's radiation environment. It's outfitted with a substance called tissue-equivalent plastic, meant to mimic the way human tissue absorbs energy (and radiation). The LRO satellite will hover over the moon for at least a year, getting an extraterrestrial suntan while mapping the lunar surface with high-resolution images and collecting other information to help lay the groundwork for a sustainable human presence there.

"We will be discovering things we don't even know how to think about right now, and that's very exciting," Spence says. "A new window on the universe." DEVIN HAHN

WEB EXTRA Harlan Spence explains his role in sending NASA's Lunar Reconnaissance Orbiter to the moon at www.bu.edu/bostonia.