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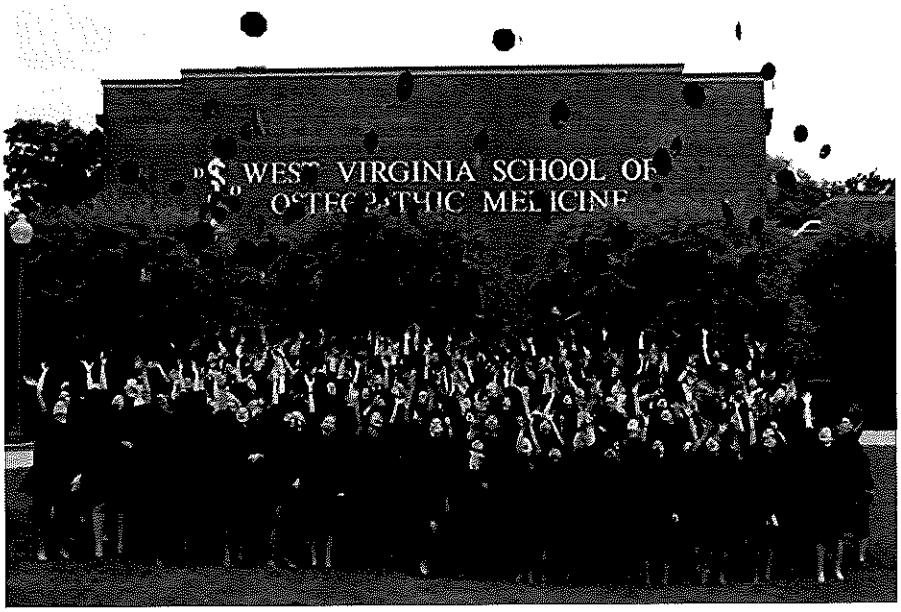
Q&A: 2014 DO grads talk specialties, policy and work-life balance

By: Rose Raymond / Staff Editor / July 1, 2014



Graduates from the West Virginia School of Osteopathic Medicine in Lewisburg gather at the school. (Photo courtesy of WVSOM)

When Chesley B. (Sully) Sullenberger III, the pilot who famously pulled off an emergency plane landing on New York's Hudson River in 2009, addressed this year's graduates at Nova Southeastern University (NSU) in Fort Lauderdale, Fla., he championed perseverance and perspective.

"No matter how dire your situation may be, know that further action is almost always possible. At the end of our lives, we may simply ask ourselves a question, 'Did I make a difference?' My wish for each of you is that your answer will be 'yes,' " he said.

For Alberto Panero, DO, who graduated from the NSU College of Osteopathic Medicine in 2009 and was a passenger on the Hudson River flight, the answer is already yes. Dr. Panero, who surprised Sullenberger at the ceremony to thank him for saving his life, is now a physical medicine and rehabilitation specialist in Sacramento, Calif., where he helps patients recover from injuries.

Across the country, nearly 4,970 osteopathic medical students from 29 osteopathic medical schools became DOs this year, according to preliminary data from the American Association of Colleges of Osteopathic Medicine. Many new osteopathic medical school graduates have already changed the lives of patients as well. Kabeer K. Shah, DO, who just graduated from the Rocky Vista University College of Osteopathic Medicine (RVUCOM) in Parker, Colo., worked with a patient with a form of treatment-refractory systemic mastocytosis during medical school. He helped the patient finally find a drug that worked for her.

"I'm really interested in personalized therapy," says Dr. Shah, who just started a pathology residency at the Mayo Clinic in Rochester, Minn.

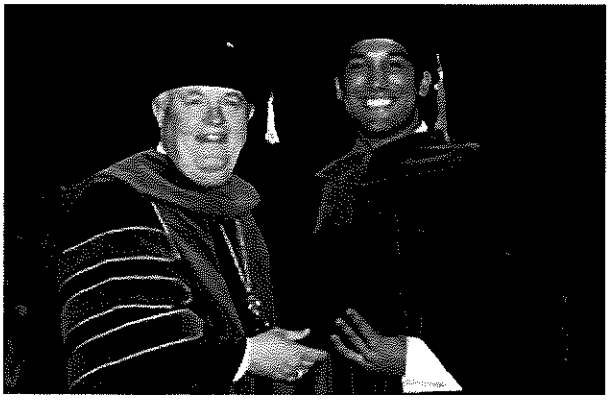
The DO recently spoke with Dr. Shah and four other freshly minted DOs also poised to make a difference, including a Pakistani physician who attended medical school for the second time and one half of the first African-American parent-

child duo to attend the University of North Texas Health Science Center Texas College of Osteopathic Medicine in Fort Worth (UNTHSC/TCOM). The new DOs shared their insights on choosing a residency, their thoughts on the current state of medicine and their advice for students. Here's what they had to say.

Kabeer K. Shah, DO

How did you choose pathology, and how did you end up at the Mayo Clinic?
Going into medical school, I had a feeling that I'd be a surgeon. I liked the instant gratification and the technology. My first year, I did a lot of shadowing with a surgical group near our school. I did about 100 hours of shadowing, and I loved every minute of it. But as the hours passed, I found myself following specimens back to pathology. I wanted to know the diagnosis so I could know what the next step was and what the treatment was.

I landed a post-sophomore fellowship in pathology at the University of Kentucky. I was still focused on surgery at this point. I thought the fellowship would be a great segue into surgery. But by the end of the year, my eyes were opened to the idea of pursuing pathology.



Dr. Shah accepts his degree from Thomas N. Told, D.O., RVUCOM's interim dean. (Photo courtesy of RVUCOM.)

As I went into my clinical rotations, I would compare each one to pathology. I would do a pros and cons table. Along the way, someone told me to consider what I was good at and what I enjoyed. For me, pathology was the winner.

The Mayo Clinic name is very well reputed, but I didn't know much about it. I did learn that my grandfather brought his brother from India all the way to Rochester, Minn., to find a diagnosis when he had a rare form of cancer. I heard about the care they received. The Mayo Clinic uses a patient-centered model, which I was looking for in the institution I was going to work for.

Initially, I didn't think I would have a chance there. I thought maybe my board scores weren't good enough, or I wouldn't have strong enough letters of recommendation, or I didn't do enough research in my first two years. As fourth year rolled around it became clear that I did have a chance. I ranked it No. 1. Now, here I am.

How will your residency be unique?
In addition to the focus on patients, the Mayo Clinic is also very focused on education. Residents receive didactic directive teaching. That's one-on-one teaching with consultants, who are the equivalent to attendings, and with the techs, who supervise the clinical laboratory. We will get a very hands-on approach to each rotation as we go through.

My residency is going to be in anatomic and clinical pathology. It's a great fit for me because I'll still have some patient interaction and I will also have the opportunity to work with the technology aspect of clinical pathology. Clinical pathology is all automation these days. There are massive platforms that take a blood sample, run it through a variety of analyzers, and give you output data based on the analysis you request.

You have done quite a bit of research as a medical student. What studies have you participated in that you're most proud of?
I had the opportunity to work with a cutaneous oncology group at the University of Colorado. A patient there had a rare case of systemic mastocytosis. She had gone through a variety of cutaneous therapies, the ones that are more

superficial, as well as systemic therapies and even chemotherapies as her mastocytosis progressed. Unfortunately, she was getting no relief from her symptoms and the disease was advancing. We opted to give her a personalized therapy by giving her a bone marrow biopsy, culturing those cells, and then treating those cells with a variety of available and soon-to-be available drugs. In our experimentation, we found a great drug that was a great fit for her mastocytosis. We brought our results back to the patient, and she's now been disease-free for some time. I would love to have the opportunity to make a direct impact on a patient again.

What did you learn in medical school besides how to be a doctor?

Networking is key. We often forget that we are not only in medical school to learn, but also to make the best opportunity for ourselves. Often, that takes some networking. Every time you meet a physician, take his or her name and number.

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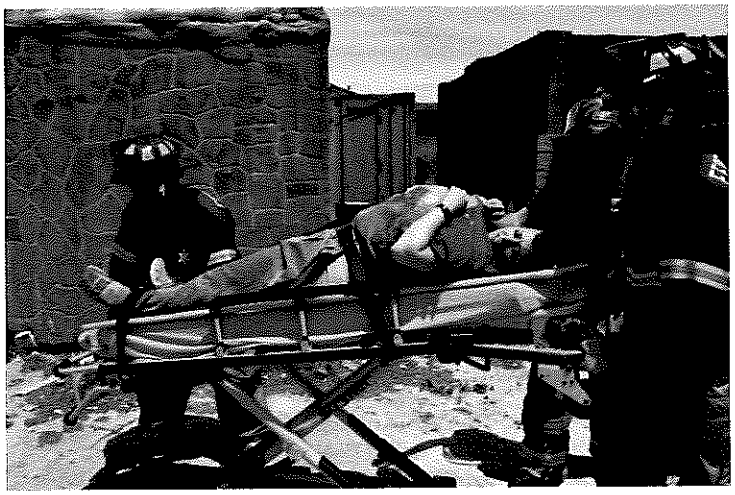
Strategic Operations Hosts Nation's First Hyper-Realistic™ Intensive Surgical Skills Course for Rocky Vista University School of Medicine

Second Year Medical Students Immersed in Week-Long Series of Life or Death Scenarios Involving Overturned Cars, Active Shooters and IEDs



First responders help Alicia Unangst, OMS-II, an RVUCOM student doctor wearing the Cut Suit. (Photo courtesy of Strategic Operations, Inc.)

SAN DIEGO — April 30, 2014 — A new emergency room in San Diego will be inundated May 5-8 with trauma casualties and very sick people requiring surgery, and second year medical students will be those performing surgeries.

The trauma will result from overturned cars, active shooters, and improvised explosive devices. All this will occur at Strategic Operations (STOPS) on the back lot of Stu Segall Productions TV/film studio and the ER and operating rooms are simulation labs constructed for a very unique – first of its kind in the nation - Intensive Surgical Skills Course (ISSC).

From May 5-8, Rocky Vista University College of Osteopathic Medicine (RVUCOM) in Parker, Colorado will conduct its ISSC at STOPS' Simulated Ambulant Lab. Overhead catwalks and video camera systems enable live viewing and after action review. Numerous live-action, Hyper-Realistic™ simulations of both medical and surgical problems will be created, immersing the participants from point of injury all the way through the ER and OR.

Surgeries will be performed on live humans – wearing Strategic Operations' simulators called "Cut Suits."

Twenty-one RVUCOM second-year medical students, many teaching faculty and visiting surgeons and physicians, as well as surgical and ER residents and staff from Balboa Naval Hospital will participate.

"Medical students commonly state that they do not truly understand or recognize a textbook description of a disease or a syndrome until they experience the clinically applicable version of it," said Strategic Operations Executive Vice President Kit Lavell. "In efforts to reduce the gaps in knowledge and technical skills prior to starting third-year clinical clerkships as well as improve competencies and confidence, this week-long ISSC mimics a General Surgery rotation.

Lavell said the ISSC will utilize the "Cut-Suit," a human worn surgical simulator, stress-immersion, and other educational modalities in an effort to better prepare RVUCOM's medical students for their third-year surgical and emergency medicine rotations. RVUCOM was the first medical school to incorporate the "Cut-Suit" into medical student education, and when integrated into an ISSC, it can provide that hands-on experience prior to clinical clerkships by presenting real-life scenarios to medical students in a flexible, safe, efficient and cost-conscious manner.

Rocky Vista University (RVU) is a health sciences university located in Parker, Colorado. RVU's College of Osteopathic Medicine (RVUCOM) was founded in 2006 and opened its doors in August of 2008, enrolling students in its four year program of study leading to the Doctor of Osteopathic Medicine (D.O.) degree. The University is located in a 145,000-square-foot contemporary facility on twenty acres, housing the latest in classroom, lecture, laboratory and audiovisual equipment, with additional instruction conducted at numerous teaching hospitals throughout the state of Colorado. Rocky Vista University provides quality healthcare education while inspiring students to serve with compassion, integrity and excellence. For more information, visit www.rvu.edu or call 720-875-2804.

About Strategic Operations

Strategic Operations Inc., on the lot of Stu Segall Productions, a full-service TV / movie studio in San Diego, Calif., provides "Hyper-Realistic™" training services and products for military, law enforcement and other organizations responsible for homeland security. The company employs state-of-the-art Hollywood battlefield special effects, combat wound effects, medical simulation systems like the "Cut Suit," role players, subject matter experts, and training scenarios to create training environments that are the most unique in the industry. Over the last 12 years Strategic Operations has provided Hyper-Realistic™ training support to more than 750,000 Soldiers, Sailors, Marines, Airmen, and Coast Guard personnel prior to combat deployment. For more information, visit www.strategic-operations.com.

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Wearable wound simulators help distinguish RVUCOM's military track

By: Carolyn Schierhorn / Staff Editor / January 29, 2013

Students in RVUCOM's military medicine track perform procedures on a Cut Suit, a human-worn surgical simulator that replicates war injuries and their complications.
(Photo courtesy of RVUCOM).

Imagine a Blackhawk helicopter landing on campus carrying badly wounded troops from the battlefield. Student doctors rush the injured warriors into a makeshift emergency room and begin lifesaving procedures.

At the Rocky Vista University College of Osteopathic Medicine (RVUCOM) in Parker, Colo., students in the military medicine track take part in such mock scenarios, thanks to Cut Suit technology: human-worn surgical simulators that can replicate all manner of wounds, hemorrhages, airway complications and intense bleeding. The suits have breakable and repairable skin, bones and internal organs, allowing students to engage in realistic resections, suturing and other procedures.

With two on loan from the manufacturer, RVUCOM is the only medical school in the country to use Cut Suits in training students, says Bruce D. Dubin, DO, JD, RVUCOM's dean.

Since Dr. Dubin launched the school's military medicine track three years ago, RVUCOM has established a reputation as a training ground for students interested in serving in the Medical Corps of the U.S. Army, Navy and Air Force.

Ninety-five students on military scholarships attend RVUCOM. The school has more students with Armed Forces Health Professions (AFHP) scholarships than any other osteopathic medical school or any MD school save for the Uniformed Services University of the Health Sciences in Bethesda, Md., according to Dr. Dubin.

"Rocky Vista is in a great location for attracting people interested in military careers because Fort Carson, Peterson Air Force Base and the U.S. Air Force Academy are in Colorado," he says.

Besides their Cut Suit training, students on AFHP scholarships practice battlefield trauma procedures on a dedicated cadaver and receive didactic instruction in combat medicine. In addition, guest speakers from the military come to campus to conduct training exercises, discuss life on the front lines, and describe Army, Navy and Air Force residency programs and career opportunities.

Cutting edge

Evolving from Hollywood special-effects technology, the Cut Suit was developed in collaboration with the military to improve training in tactical combat casualty care.

Retired Army colonel Anthony LaPorta, MD, the course director of RVUCOM's military medicine track, spearheaded the school's adoption of the wearable simulators just over a year ago, when they became declassified. A general surgeon

involved in military surgical education for 26 years, Dr. LaPorta has since become a leading champion of Cut Suit technology.

Because of the portability of the 30-pound suits, Dr. LaPorta can take them to military training sites. Recently he brought several second-year RVUCOM students to Fort Carson, where he trained them alongside U.S. Army Special Forces, including medics, in battlefield procedures. "The special ops like being able to train in scenarios with real human stress, provided by the actors who wear the Cut Suits," he says.

Dr. LaPorta is helping to research improvements in the Cut Suit, providing feedback to the manufacturer on how to refine the simulation of various organ systems. Currently, some parts and processes are more sophisticated than others.

For example, the suit simulates limb amputations effectively, with profuse fake bleeding controlled by a pump. "The correct application of a tourniquet will stop the bleeding," he says. "But I also want a real-feeling mesentery. I want students to have the experience that if they tie a knot in this tissue correctly, the bleeding will stop and if they don't, the bleeding will continue."

Dr. LaPorta and the Cut Suit manufacturer are working with the University of Minnesota's Center for Research in Education and Simulation Technologies, which has an extensive database of human tissue properties used to develop accurate simulation models. The first project in this collaboration will be a realistic model of a mesentery with arcaded blood supply to a segment of the small intestine.

As it is, the Cut Suit is a great training tool for a number of procedures, according to Dr. LaPorta. "Using the suit, you can do a cricothyrotomy, a needle decompression of a tension pneumothorax, and a full tube insertion," he says. "You can open the chest completely and control bleeding and take out a lung. You can open the abdomen completely and control bleeding and do a partial liver resection."

As the technology improves, RVUCOM will use the suits in nonmilitary classes.

A biomedical engineer who was in the Army Reserves for 12 years before attending RVUCOM, Genevieve R. Mueller, OMS III, has acquired enough experience using Cut Suits that she helps Dr. LaPorta as a training assistant, sometimes wearing one of the suits. "Because of a protective metal plate, the actor wearing a Cut Suit just feels a little overall pressure," she says. "It is very warm in there, however."

Mueller points out that she and her classmates were lucky to have been able to use the suits in their second year of med school. Although operating on a cadaver gives students a better view of human anatomy, performing procedures on a Cut Suit has several advantages, she says.

"When cadavers are chemically treated, the tissue properties change. Although a Cut Suit isn't exactly like human tissue, it feels more lifelike than cadaver tissue does," Mueller says. In addition, the suits simulate real surgical sounds and odors.

"The Cut Suit has controlled vascularity, so that if you're cutting into the abdomen and nick the bowel, it will start to bleed and even smell like a bowel," says Mueller. "And because someone wears the Cut Suit, the overall experience is much more real for students."

Well-matched

Mueller, who plans to become an emergency physician, has already scheduled her fourth-year audition rotations at Army hospitals. The military match takes place in mid-December.

In December 2012, 23 fourth-years at RVUCOM took part in the military match. Eight students matched into Army residency programs, nine into Navy residencies and five into Air Force programs. "Our military medicine training at Rocky Vista prepares us well for the challenges of residency and combat care," Mueller says.

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Then and now: How Sept. 11 shaped disaster response education

By: Rose Raymond / Staff Editor / September 6, 2012

Erin Philpott, OMS III, assists with stabilizing a "victim" during disaster response training at RVUCOM. The medical school is the only one in the U.S. requiring all students to take both of the NDLSF's Basic and Advanced Disaster Life Support courses. (Photo courtesy of RVUCOM)

On the morning of Sept. 11, 2001, Kenneth J. Steier, DO, was on New York's Long Island, making rounds at Nassau University Medical Center (NUMC) in the hospital's cardiac care unit. On hospital TVs, Dr. Steier saw that the first plane had hit the World Trade Center. Like many others, he thought it was an accident.

Dr. Steier and his colleagues went to the top of the hospital building. Twenty stories up and 25 miles away from the World Trade Center, they watched giant clouds of smoke rising from the city. Dr. Steier and his staff heard about a second plane hitting, about planes crashing in other places, and quickly understood that this wasn't an accident.

The hospital staff emptied beds to make space for victims and sent a team into New York by ambulance. But the bridges to Manhattan were closed, and most victims were treated locally, Dr. Steier says. Still, he and his staff were overwhelmed.

"Everybody knew people who worked at the World Trade Center," he says. "If you didn't know someone who worked there, you about people who were responding because you could see all the smoke and soot, all the ground-up stuff that people were breathing."

Dr. Steier eventually treated many of the attack's first responders. A number of them were firefighters and policemen who lived on Long Island but worked in Manhattan. NUMC received state and federal grants to set up a 9/11 clinic where first responders could go for free medical treatment. A lot of the clinic's patients worked at ground zero without masks and eyewear, which led to eye and lung problems and possibly cancer, Dr. Steier says.

9/11 drives change

Working with first responders after 9/11 informed his approach to medical education, says Dr. Steier, who was in charge of NUMC's residency program at the time. Educators at many osteopathic medical schools were inspired by 9/11 to re-evaluate and ramp up their institution's disaster prevention and response offerings. "Sept. 11 was a tremendous stimulus toward education in disaster preparedness," Dr. Steier says. "People were very unprepared." Along with increased drills, there was a boom in disaster response courses and a greater emphasis on preparation.

Dr. Steier learned there was a greater need for disaster preparation, and he incorporated that into the residency program at NUMC. He discovered and then taught his residents the importance of the complete history of a patient's exposure to toxic environments.

Now a clinical dean and a professor at the Touro College of Osteopathic Medicine in New York City (TouroCOM), which opened in 2007 nine miles north of ground zero, Dr. Steier says TouroCOM integrated 9/11-related disaster response

training into its curriculum. The school's pulmonary module of the clinical coursework, for instance, includes a case presentation of a first responder to ground zero. TouroCOM also has a member of the New York City Disaster Response Team speak to the faculty and students each year, and it has a patient representing a ground zero first responder in its objective structured clinical examination lab.

Medical education expert Tyler C. Cymet, DO, says the proximity of the attacks underscored the importance of disaster medicine because it became clear that disasters of this scale could happen within U.S. borders, not just internationally.

"We've always had one hour of radiation exposure training in medical school, but it was more of an overview," says Dr. Cymet, the associate vice president for medical education at the American Association of Colleges of Osteopathic Medicine. "Sept. 11 made it real. We need to know this because it might really happen here."

Dr. Cymet, who treated some of the anthrax victims in the months following 9/11, says the attacks led to an increased focus on public health and prevention at osteopathic medical schools. He specifically points to the Institute for Disaster and Emergency Preparedness at Nova Southeastern University College of Osteopathic Medicine in Fort Lauderdale, Fla. Established in response to 9/11 with grant funding, the center puts out educational materials on bioterrorism and all-hazards preparedness for osteopathic physicians and students and other health care professionals.

On a broader scale, some osteopathic medical schools now offer elective or mandatory courses developed by the National Disaster Life Support Foundation (NDLSF) in response to 9/11. The courses provide an overview of disaster management, prevention and preparation concepts as well as information about federal, state and local disaster response systems. Osteopathic medical schools are leading the charge in offering the courses, says Italo A. Subbarao, DO, the recently departed director of the Public Health Readiness Office at the American Medical Association.

Lifelike drills, real-world exposure

Rocky Vista University College of Osteopathic Medicine in Parker, Colo., made headlines recently for its disaster drills. It's the first medical school in the country to incorporate what's called a "cut suit" into its disaster response education. Usually worn by an actor, the lifelike costume can bleed and be arranged to simulate wounds such as those from gunshots, explosions and stabbings. Students can use the suit to practice performing surgery, applying tourniquets and other procedures.

RVUCOM is also the only medical school in the U.S. requiring all students to take both of the NDLSF's Basic and Advanced Disaster Life Support courses. Bruce D. Dubin, DO, the acting president and dean of RVUCOM, says his interest in disaster medicine was sparked after 9/11 when his then-boss, Ronald R. Blanck, DO, the former surgeon general of the U.S. Army, encouraged his interest in researching first response medicine and weapons of mass destruction.

Around the same time, Dr. Dubin was seeing his students on clinical rotations in rural areas. They were often asked to work as or with first responders in local disasters—for instance, an overturned truck on the freeway, a house fire, a tornado. Hearing their stories made Dr. Dubin realize that all medical students could benefit from learning disaster response skills.

Dr. Dubin then developed an advanced disaster training program for all students at the University of North Texas Health Science Center Texas College of Osteopathic Medicine in Fort Worth, where he was working. He brought the program with him to RVUCOM, where he expanded it.

"Disasters can and do happen anywhere and everywhere," Dr. Dubin says. "We have to be prepared for these kinds of things on U.S. soil."

Students worked in a mock emergency room in one of the most recent RVUCOM drills, says Regan A. Stiegmann, OMS III, the president of RVUCOM's 2014 class. A UH-60 Black Hawk helicopter flew in and students off-loaded a dummy casualty, then triaged three patients with simulated injuries. One wore a cut suit. The students in the mock ER had about 5 minutes warning and no prior knowledge of the patients' injuries, which included an artery laceration, shrapnel wounds and a blast injury. Everything happened in the span of 30 to 45 minutes—just as it could in real life.

"It put you in a position where you could see what it's really like," Stiegmann says, "because the actors were painted, and they had glass shards sticking in their face, or they had an arm blown off, or they were unconscious. You got the full gamut of what you would really see in a disaster."

'Not too much to ask'

While 9/11 and other disasters prompted a number of osteopathic medical schools to offer more disaster medicine courses, many U.S. medical students do not feel they receive adequate disaster training, according to a 2009 survey published in *Disaster Medicine and Public Health Preparedness*.

All osteopathic medical schools should offer disaster response courses in their curriculum, says William Bograkos, DO, a member of the AOA's Bureau of Scientific Affairs and Public Health and a veteran of disaster medicine. At this point, the profession's 26 schools have not incorporated a standard set of disaster course work, he says.

"We should have some learning objectives," he says. "Two hours of disaster medicine is not too much to ask."

In 2011, the AOA House of Delegates approved a resolution calling for osteopathic medical schools to offer disaster response training and courses. The resolution was co-written by Dr. Bograkos and submitted by the Bureau of Scientific Affairs and Public Health; in it, the team cited the increasing incidence of man-made and natural disasters worldwide. Disaster response typically requires a different skill set than standard emergency care, the authors noted.

"Most of the time, people think disaster medicine, they think lights and sirens, emergency medicine," Dr. Bograkos says. "But public health plays a very important role because of water, immunization, food, shelter, and basic needs."

The bureau's intent, Dr. Bograkos says, was to encourage young physicians to consider disaster preparedness, as they are all likely to work in disaster scenarios at some point in their careers.

Views from ground zero

Two physicians who provided osteopathic manipulative treatment at ground zero after 9/11, Terrence M. Mulligan, DO, and John B. Caramagna, DO, also believe all medical students should learn basic disaster response skills, though neither physician received disaster training in medical school.

Dr. Mulligan, who had completed an emergency medicine residency prior to 9/11 but was working as an osteopathic manipulative medicine resident in the Bronx that day, says physicians might be surprised by when they need to apply disaster training.

"We always think of disasters being a tsunami or a 9/11, but maybe it's a school bus accident, and all of a sudden 30 kids pull into your ER," Dr. Mulligan says. "A place that's designed to see eight new patients an hour can be easily overwhelmed by something like an apartment building fire."

Medical students and physicians should know their institution's and their community's disaster response procedures, Dr. Mulligan says.

"If you don't know what to do in order to get more help and more resources, how to activate a disaster plan, then the patients aren't going to do well," Dr. Mulligan says. "So it's worth it to teach all students at least an introduction."

Dr. Caramagna agrees. Students and physicians who don't typically work in emergency settings will be well-served to know their local disaster plans, including who will be in charge and where they as physicians fit in, he says.

"A medical professional who is not skilled in disaster management and doesn't practice it every single day needs to take a disaster response course," Dr. Caramagna says. When volunteering, it's best if novices follow the instructions of those who practice disaster response daily, he says.

Also, osteopathic physicians should be aware that they'll have something special to contribute in a disaster's aftermath, Dr. Mulligan says.

On Sept. 11, after a morning of learning of colleague's deaths, trying to locate his friends, and processing what had happened, Dr. Mulligan was talking about the attacks with a fellow resident and DO. When she started crying and ran outside, Dr. Mulligan followed her. Watching the smoke emcompass Manhattan, the pair decided what they were going to do.

"I remember her saying, 'I just feel so helpless,'" Dr. Mulligan says. "And I said, 'You're a doctor, there's a tremendous amount you can do.'"

The next day, they went to ground zero, where they spent several days a week for three months providing osteopathic manipulative treatment to first responders.

"We really felt like we were contributing because we were providing a service as osteopathic physicians," Dr. Mulligan says. Physicians in other specialties, he says, had less to offer in the weeks after 9/11 as fewer people required serious medical treatment, but the need for osteopathic manipulation was constant.

The next 9/11

Dr. Steier says he hopes all physicians and medical students will use the knowledge gained from past disasters to better prepare for those yet to come. He says it's important for the osteopathic medical profession to avoid becoming complacent as 9/11 recedes further into the past.

"We have to make sure to do adequate drills so that we are prepared," he says.

Disaster response training has made Stiegmann and her classmates at RVUCOM think about future disasters and how to best deal with them, she says. They wonder what the next HIV, the next 9/11 might be, and how they'll be able to help.

"Nobody can predict the future," Stiegmann says, "But being as prepared as possible for it is always the best strategy."

PARKER CHRONICLE

School's Disaster Drills Add 'Hyperrealism'

By: Chris Michlewicz / August 3, 2012

Maj. Gen. Philip Volpe, D.O., knows what it's like to stare into the eyes of a dying patient and perform an impromptu surgery that's not likely to work.

A military trauma team made up of students from Rocky Vista University College of Osteopathic Medicine treats a mock patient in a cut suit demonstration during an orientation for the incoming class of students July 24. (Photo by: Chris Michlewicz)

Volpe, an osteopathic physician, is commanding general of the Army's Western Regional Medical Command. He was the command surgeon during the infamous Black Hawk Down incident, in which an elite Special Forces group came under siege in Mogadishu, Somalia, in 1993 while trying to bring warlords into custody for international crimes.

He told the incoming students at Rocky Vista University College of Osteopathic Medicine in Parker that the patient can sometimes be a friend. Volpe has even made the painful decision of who dies and who lives.

It's a situation that each student is likely to face sometime in his or her career, and Rocky Vista makes sure its students are fully prepared to save lives. The school's dean, Bruce Dubin, D.O., says Rocky Vista is the only medical school in the country that utilizes a "sense of hyperrealism" in emergency drills to offer hands-on experience in which no lives are on the line.

During a demonstration July 24 after Volpe's address to the class of 2016, a team of third-year students acted out a scenario using a "cut suit." The military trauma team cut into the body suit that contains replicas of human organs; a remote control determines the amount of blood flow. The team communicated effectively, clamping off hemorrhaging and stabilizing the "patient," an actor who was writhing as if in pain.

"The ability to have thought about it and experienced it ahead of time in simulation has the opportunity to make you a better doctor and provide better care for the patients that we serve," Dubin said.

On July 21, Rocky Vista staged an Advanced Disaster Life Support training exercise on campus. The in-depth disaster training scenarios are "unfortunately timely, following the tragic shootings that unfolded in Aurora," the school said in a statement. Rocky Vista originally planned the July 24 scenario with a small explosion and demonstration that would not be announced to the students ahead of time, but changed plans hours before the exercise because of the sensitivity of the public following the movie theater tragedy that took 12 lives and injured 58 people July 20.

Volpe urged the students to consider what they say and how they act with a patient who is severely injured. Working with actors helps mimic the stress involved, he said.

Susan Bauer, 35, an incoming student from Minnesota who sat in the second row for the orientation session, said experience working with mock patients is invaluable. The realistic training is part of what attracted her to the school, which opened north of E-470 on Chambers Road in 2006.

"Maybe it's not truly real, but it looks real, it smells real, it seems real, and when all of a sudden you have the real situation in front of you, it's not as bad because you've already done it," she said.

The cut suit, which Bauer called "incredibly innovative," has her eager to learn more. She says witnessing the scenario made her realize that "we have really cool things that I don't get to play with yet."