# The Weekly



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# Practice makes perfect at Surgical Simulation Center

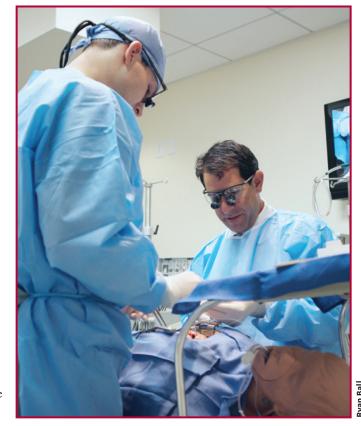
#### By Josh Grossberg

Becoming a doctor requires years of attending lectures, watching PowerPoint presentations and reading stacks of thick textbooks filled with charts and graphs.

But at some point, young students and physician residents at Los Angeles County + USC will have to put down the heavy tomes and pick up a scalpel or a needle holder to begin the work of helping to make patients better.

To help them reach that goal as skillfully as possible, the Department of Surgery at the Keck School of Medicine of USC provides them with a variety of simulation options to teach procedural based skills. This provides the opportunity to practice — and practice some more — before they ever touch a patient. Now, students and young physicians can hone their skills in an environment that is safe, but also real enough to mimic the stress of a real-life situation.

"Historically, a student's first experience performing simple procedures on a patient occurred in a clinical, and often stressful setting," said program Executive Director Maura Sullivan, PhD. "It sounds really



Craig Baker (right) and second year resident John Cleveland (left) perform a surgical simulation at the Surgical Skills Simulation and Education Center.

simple, but practicing those skills first is important."

Originally built as one room at its opening in 2000, the Surgical Skills Simulation and Education Center has expanded to

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# Pasadena Magazine honors USC Doctors

USC physicians continued to make impressive gains this year in an annual ranking of doctors in the San Gabriel Valley

In all, 345 USC physicians have been included in *Pasadena Magazine*'s 2013 roster of "Top Doctors," up from 273 last year and 170 in 2011. The doctors represent 34 different specialties, including oncology, radiology, neurology, orthopaedic surgery, ophthalmology and cardiology. They comprise nearly one-third of the magazine's entire roster.

"This recognition proves what we've long known:
Our continuing efforts to provide great patient care with the best doctors shows real results," said Tom
Jackiewicz, MPH, senior vice president and CEO for USC
Health. "We're proud of our doctors and happy that their accomplishments are being recognized in the community."

The list includes 227 Keck Medicine of USC physicians, and 118 USC faculty physicians who practice at Children's Hospital Los Angeles and LAC+USC Medical Center.

An additional 21 physicians who practice at the new USC Verdugo Hills Hospital were also recognized, representing specialties such as dermatology, obstetrics and gynecology, and internal medicine.

To be considered for inclusion in the list, physicians in the San Gabriel Valley and Los Angeles area were nominated and then voted on by their peers, who submitted confidential ballots. Doctors cannot pay to be included on the list

"Congratulations to each and every physician who was included in this year's roster," said Carmen A. Puliafito, MD, MBA, dean of the Keck School of Medicine of USC. "Their outstanding work is a testament to our growing reputation as a leader in academic medicine. We couldn't make the gains we're making without their dedication."

Pasadena Magazine serves the greater San Gabriel Valley area. It has published the list since June 2008.

## Thomas McAfee named CEO of new Keck Medicine of USC Medical Foundation

#### By Leslie Ridgeway

Thomas McAfee, MD, dean of clinical affairs at UC San Diego Health Sciences, has been appointed the CEO of the newly forming Keck Medicine of USC Medical Foundation. He begins his new role on Sept. 3.

The development of a community medical foundation intended to add primary and specialty practices into the Keck Medicine network was a key initiative identified as part of the clinical enterprise-wide strategic plan

"As CEO of the new foundation, McAfee will play a key role in developing the health system's physician alignment strategy," said Shawn Sheffield, MBA, MHSA, chief strategy and system development officer for Keck Medicine of USC. "A critical function will be to establish the foundation and attract marquee groups and physicians to affiliate with Keck Medicine of USC."

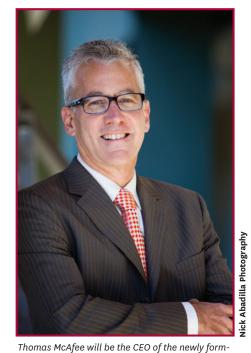
The foundation model in development will be the Keck Medicine of USC home for acquired physician practices, enabling the enterprise to provide a comprehensive range of health services in a broader geographic footprint. It also will allow Keck Medicine to expand its participation in the managed care environment, and service

the health needs of USC employees more efficiently.

"Tom McAfee has both the clinical and health-care business management experience to excel in this new role," said Tom Jackiewicz, MPH, senior vice president and CEO of USC Health, to whom McAfee will report. "I am confident that his leadership will take our health-care system to a new level of excellence."

McAfee will develop and maintain close working relationships with physician groups, local hospitals and other clinical service providers; create an integrated electronic clinical practice environment to facilitate care coordination and streamline referrals; and promote collaboration among physicians within the foundation and with USC clinical faculty. In his role, he also will work closely with Keck Medicine department chairs, as well as leadership of the Keck Medical Center of USC, USC Verdugo Hills Hospital and the USC Care Medical Group (composed of Keck School of Medicine of USC faculty physicians), which are all part of Keck Medicine of USC.

"Physicians in independent practice are increasingly financially tethered to medical centers," said John Niparko,



ing Keck Medicine of USC Medical Foundation. He begins his new role on Sept. 3.

MD, president of USC Care Medical Group. "Our current economics and health reform are accelerating this trend. These partnerships have many working parts, however. With his experience, McAfee offers insight and flexible thinking in developing well-

managed physician foundations. He knows how to build these relationships. His appointment reflects Keck Medicine's desire to develop new approaches and an exceptional system of health care for Southern Califor-

McAfee said he is looking forward to joining Keck Medicine of USC and being part of transformative decisions affecting the clinical enterprise.

"USC has developed an ambitious vision to be a top performing medical school and health system regionally and nationally," McAfee said. "Tom Jackiewicz has assembled a first-rate leadership system, and the faculty and department chairs impressed me as having the commitment and passion to be the best. It's an exciting time to be at USC."

Of the opportunity to shape a new medical foundation, McAfee said, "It's a new strategic opportunity to create something that hasn't existed at USC before. The key success will be selecting the right physicians. We have a powerful brand name in Los Angeles and beyond, and to preserve that brand equity, we need to include physicians who are the best in their

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# USC announces winners of inaugural Regenerative Medicine Initiative Awards

#### By Cristy Lytal

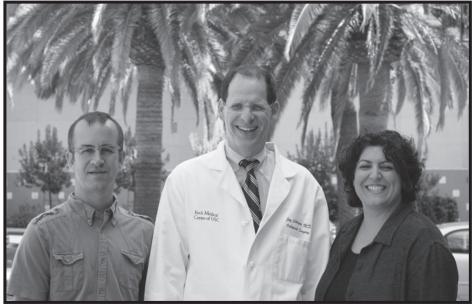
Three newly assembled research teams within USC Stem Cell, the regenerative medicine initiative at USC, will take steps that could lead to future stem-cell based therapies for certain forms of deafness, bone defects and pediatric leukemia.

The teams are the winners of USC's Regenerative Medicine Initiative (RMI), a University-wide program kick-started by \$1.2 million in funding from the office of Carmen A. Puliafito, MD, MBA, dean of the Keck School of Medicine of USC. Each RMI Award provides up to \$200,000 per year for two years to multi-investigator research collaborations that harness the full potential of USC-affiliated faculty members.

"We hope these are the first of many awards as we continue to develop new strategies to enable and empower regenerative medicine researchers across USC," explained Andrew McMahon, PhD, director of the Eli and Edythe Broad Center for Regenerative Medicine and Stem Cell Research at USC, who is spearheading USC Stem Cell and the RMI Awards.

The three winning teams were selected from 26 proposals, involving 80 faculty members from Children's Hospital Los Angeles (CHLA); the USC Viterbi School of Engineering; the USC Dornsife College of Letters, Arts and Sciences; the House Ear Institute; the USC School of Pharmacy; the Ostrow School of Dentistry of USC; and the Keck School of Medicine.

For the first team, Neil Segil, PhD, and Takahiro Ohyama, PhD — both from the House Ear Institute — will work with Justin Ichida, PhD, assistant



Gage Crump, Jay R. Lieberman and Francesca Mariani comprise one of the winning RMI teams who will be performing multi-investigator collaborations as part of USC's regenerative medicine initiative. By studying mice and zebrafish, their team will focus on ways to repair human bones through the use of osteoblasts.

professor of stem cell biology and regenerative medicine, on curing deafness by using cellular reprograming to create inner ear cells, including sensory hair cells. The death of these cells, which humans and other mammals cannot regenerate, is the most common cause of deafness.

The second team will focus on ways to repair human bones through lessons learned from mice and zebrafish. When mouse ribs or zebrafish jaws are damaged, special cartilage cells transform into bone-producing cells called osteoblasts. The team hopes to show that osteoblasts can effectively heal severe bone damage.

The project brings together Jay R. Lieberman,

MD, a clinical orthopaedic surgeon and chair of the Department of Orthopaedic Surgery; and assistant professors of cell and neurobiology Gage Crump, PhD, and Francesca Mariani, PhD.

The third team will develop therapy for B-precursor acute lymphoblastic leukemia (BPL), the most common form of cancer in children and adolescents. Some children with BPL have a genetic defect that results in the production of an abnormal form of the protein CD22E12, which causes their cancer stem cells to proliferate and resist chemotherapy. The team will use insights gained from studying CD22E12 to design new and more effective treatment strategies.

Fatih Uckun, MD, PhD, professor of research pediatrics who heads the translational research in leukemia lymphoma at the Children's Center for Cancer and Blood Diseases of CHLA, and Gregor Adams, PhD, assistant professor of cell and neurobiology, are co-principal investigators on the project. They will collaborate with Frank Alber, associate professor of biological sciences at USC Dornsife, and colleagues across multiple campuses.

"I view this as an opportunity to work together with my colleagues," said Uckun. "Only by working as a team can we accomplish the goal of helping children who are in urgent need of a new treatment."

### John Ferrelli appointed chief administrative officer for USC Norris Cancer Hospital



John Ferrelli

John Ferrelli has been appointed to the position of chief administrative officer (CAO) for USC Norris Cancer Hospital, effective Aug. 1. Ferrelli will be responsible for managing and coordinating the administrative, fiscal and operational activities of USC Norris Cancer Hospital.

"The CAO is a new position for our cancer

hospital, and one that will be key in ensuring continued growth of inpatient and outpatient cancer

services in and beyond the Health Sciences Campus," said Scott Evans, PharmD, MHA, CEO of Keck Hospital of USC and USC Norris Cancer Hospital.

Ferrelli will report directly to Evans, and will work collaboratively with physicians, leaders and departments across the Keck Medical Center of USC and the USC Norris Comprehensive Cancer Center to coordinate high-quality, translational cancer care.

As CAO, Ferrelli will provide critical oversight for planning, implementing, monitoring and evaluating services across the continuum of care for USC's cancer patients. He will provide leadership in developing comprehensive, multidisciplinary cancer programs across the hospitals and ambulatory clinics, and will help drive cancer-related clinical and physician

community outreach, in support of building a robust referral program for USC Norris Cancer Hospital.

Before joining USC, he served as corporate chief operating officer at Avanti Hospitals, a Los Angeles health system comprising four hospitals and 500 beds. Prior to that, Ferrelli held executive positions at several other Southern California hospitals, including CEO positions at Coast Plaza Hospital in Norwalk, Memorial Hospital of Gardena and JFK Memorial Hospital in Indio.

Ferrelli has also held leadership positions at health-care organizations in Florida, Louisiana and Tennessee. He holds a bachelor's degree in biology from Knox College in Illinois, and a master's degree in business administration from Northwestern University.

# The Weekly

### Next Issue: Aug. 23

The Weekly is published for the faculty, staff, students, volunteers and visitors in the University of Southern California's Health Sciences campus community. It is written and produced by the Health Sciences Public Relations and Marketing staff. Comments, suggestions and story ideas are welcome. Permission to reprint articles with attribution is freely given.

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#### Did you know?

Since 1972, the USC Norris Comprehensive Cancer Center and the Keck School of Medicine of USC have administered the Los Angeles County Cancer Surveillance Program (CSP), the official population-based cancer registry for Los Angeles County.

The CSP routinely collects and analyzes information on all new diagnoses of cancer that are made among residents of the county. The CSP is a member of the California statewide population-based cancer surveillance system, known as the California Cancer Registry (CCR).

With the large and diverse population that resides in Los Angeles County, the CSP has served as a resource for many epidemiological studies of cancer throughout Los Angeles County.

# Community comment sought for Health Sciences Master Plan

#### By Amy E. Hamaker

Big changes are coming to the Health Sciences Campus neighborhood as part of the USC HSC Master Plan. As part of the community, USC recently invited neighborhood residents to add their input to the process.

Two special workshops on implementation of the HSC Master Plan and streetscape were held for community members on Aug. 3 and Aug. 8 at Hazard Park. The events were co-sponsored by the LA-32 Neighborhood Council and the office of Councilmember José Huizar.

Approved by university trustees in 2011, the Master Plan guides future campus growth for academic, research and clinical space over the next 25 to 30 years. Boundaries include Valley Blvd. (north), Soto St. (east), Zonal Ave. (south) and Mission Rd. (east).

"I believe that democracy is at its best when people come together, and I really do appreciate the fact that you are here," said Martha Escutia, vice president, government relations for USC, who welcomed the crowd. "USC is your neighbor, and has been here for more than 100 years. USC is going to stay here for as long as possible because they have made a commitment to this community."

Laurie Stone, executive director of land use & planning, gave a short presentation on plan implementation as part of a formal outreach process. The presentation included:

New student housing: A four-story, 157-unit housing facility for graduate medical students and their families. Developer American Campus Community is building and operating the housing for the university, and the facility is anticipated to open in fall 2016. The building will be located north of Alcazar St., between Soto and San Pablo Streets, and will include an additional day care center for the campus, more than doubling current existing capacity.

Hotel: A 200-room building with extended-stay suites for families visiting patients at the Keck Medical Center of USC and for the community. Plans include retail space on the ground floor, a restaurant and 14,000 square feet of conference space. Although the university is still in negotiation with developers, opening is anticipated in 2016 and the hotel will be located at the northeast corner of San Pablo and Alcazar Streets.

Norris Healthcare Consultation Center: A 110,000-square-foot facility to house cancer-focused medical activities, including multidisciplinary clinics designed to facilitate interaction among teams, infusion therapy, an ambulatory surgery center and a women's cancer program. Ground was broken on the project on May 2; the building will be located on Alcazar St. behind Keck Hospital of USC.

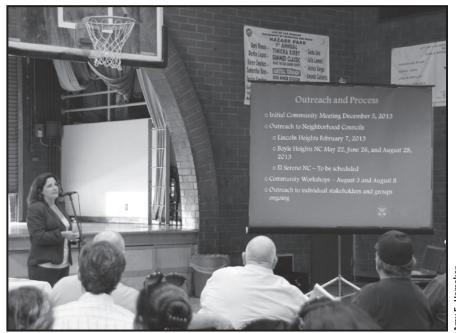
Norfolk Street Extension and Streetscape Beautification: The City's General Plan includes the completion of Norfolk St., from Playground St., to connect it with Soto St. To accomplish this, current handball courts will be moved to a new location and a new traffic signal will be added at the intersection of Norfolk and Soto Streets. Several

benefits to the park itself have also been proposed, including a new play structure for children ages 2-5, upgrades to gym restrooms, a new ADA-compliant path from the handball courts to the gym, new lighting, new trees, and new picnic tables and benches for the new handball courts.

In addition to the extension, the university is investing significantly in the overall campus streetscape, with the underground placement of overhead utilities, sidewalk widening, more than 200 new street trees, new street lighting, decorative brick banding in sidewalks and crosswalks, and a comprehensive signage program.

Community comments centered on the Norfolk Street Extension, and the concern that current green space will be lost and traffic, noise and pollution will all increase. Speakers also suggested that USC work with the community to better determine needs for Hazard Park. After the open comment session, consultants and experts were available to answer individual questions from the public.

Craig Keys, associate senior vice president, civic engagement, thanked audience members for their comments and suggestions. "We need your comments and ideas to make this project work for both the university and the community," he said.



Laurie Stone, executive director of land use & planning, presents details of USC's community outreach and the components of the Master Plan to community members at a workshop at Hazard Park on Aug. 3.

#### MCAFEE: New CEO will lead forming medical foundation's clinical quality agenda

#### Continued from Page 1

fields and in the market."

McAfee's background includes more than 10 years at the UC San Diego Health System, where he is also president of the UC San Diego Ambulatory Surgery Center, CEO of the UC San Diego Faculty Practice, and clinical professor in the Department of Medicine at the UC San Diego School of Medicine. Prior to his UCSD tenure, McAfee served as associ-

ate chief medical officer and faculty member at the University of California, San Francisco, vice president of UC-Stanford Health Care, and executive vice president of the Brown and Toland Medical Group. He earned a bachelor's degree in biology at Pomona College in Claremont, Calif., and his doctor of medicine degree at Georgetown University, and performed his medical internship and residency at Georgetown University Hospital.

McAfee's duties at Keck Medicine of USC will include leading the development of the medical foundation's clinical quality agenda, setting standards of care, measuring and improving clinical outcomes, and disseminating best practices. He will chair key physician committees aimed at aligning clinical programs, integrating standards of care, and driving continuous improvement of quality of the Keck Medicine of USC Medical Foundation.

## The Weekly NEWSMAKERS

An Aug. 6 article in *Wired* featured a patient who's had partial eyesight restored by the Argus II, an optical implant developed by **Mark Humayun**, MD, PhD, Cornelius Pings Professor of Biomedical Sciences and professor of ophthalmology, biomedical engineering, cell and neurobiology at the Keck School of Medicine and Viterbi School. The device allows those wearing a visor to see borders and boundaries at low resolution. "It's not the way we normally see, but it activates the same function," Humayun said.

An Aug. 5 broadcast on ABC News Los Angeles affiliate KABC-TV featured research from Children's Hospital Los Angeles that links cognitive disabilities to differences in the developing brain. The story included an interview with **Douglas Vanderbilt**, MD, assistant professor of clinical pediatrics at the Keck School of Medicine, and **Natasha Leporé**, PhD, assistant professor of research in radiology at the Keck School of Medicine.

An Aug. 3 op-ed in the *Glendale News-Press* mentioned that the **USC Verdugo Hills Hospital** is one of three hospitals working in unison to share electronic medical data in order to improve the coordination of patient care.

An Aug. 2 broadcast on ABC News Los Angeles affiliate KABC-TV featured research led by **Tracy Grikscheit**, MD, visiting assistant professor of pediatric surgery at the Keck School of Medicine, on engineering intestines through stem cells. The story quoted **Russell Merritt**, MD, PhD, clinical professor of pediatrics at the Keck School, about a patient who had a birth defect that caused his intestine to grow outside of his body.

An Aug. 2 story in the *Los Angeles Daily News* mentioned that **Keck Hospital of USC** was included in a ranking of the safest hospitals in California.

A July 30 broadcast of CBS News' "This Morning" interviewed  $\bf David\ Agus,\ MD,\ professor\ of\ medicine$ 

at the Keck School of Medicine, about redefining cancer in order to better treat more threatening forms of the disease. The risk of aggressive treatment of slow-growing cancers include unnecessarily undergoing "radical therapy," including surgery and radiation, treatments that could cause "lots of side effects when it's not needed," Agus said. "The key is to treat the cancers we need to treat, so we need a new definition."

A July 29 article in the *Beverly Hills Courier* featured research led by **Pat Levitt**, PhD, Provost Professor of neuroscience, psychiatry, psychology and pharmacy at USC, which explores the role that oxidative stress may have in children with autism and gastrointestinal disturbances. The story also quoted **Brent Polk**, chair of pediatrics and vice dean for child health at the Keck School of Medicine. "With one in three families affected by neurodevelopmental or cognitive disorders, this finding could have a farreaching impact," Polk said.

# Calendar of Events

#### Tuesday, Aug. 13

10 a.m. ZNI Seminar. "The Trials and Tribulations of the Spiny Mouse: A Non-Model Species for Perinatal Research," Hayley Dickinson, Monash University. ZNI 112. Info: (323) 442-2144

Noon. Psychiatry Grand Rounds. "How and Why Faculty Can Lead Quality Improvement," Michele Pato, USC. ZNI 112. Info: (323) 442-4065

**4 p.m.** Women's Cancers Program Monthly Research Seminar. "While You Study the Fingerprints, I Will Identify the Serial Killer: Ovarian Cancer Pathology Overview," Paulette Mhawech-Fauceglia, USC. NOR 7409. Info: (323) 865-0801

#### Wednesday, Aug. 14

8:30 a.m. Medicine Grand Rounds. "Pulmonary Hypertension," Sivagini Ganesh, Cedar-Sinai. IRD 732-734. Info: (323) 226-7923

11 a.m. KSOM Department of Pathology Lecture. "A New Role for Ion Channels, Nuclear Receptors and Magnesium in the Regulation of Arthritis Severity and Joint Damage," Percio Gulko, Hofstra North Shore – LIJ School of Medicine. NOR 7409. Info: (323) 442-1180

#### Friday, Aug. 16

5 p.m. - 6:30 p.m. Keek School of Medicine of USC White Coat Ceremony. Pappas Quad. Info: (323) 442-2552

#### Tuesday, Aug. 20

Noon. Psychiatry Grand Rounds. "Pain: Spiritual and Psychological Aspects," Steven Richeimer, USC. ZNI 112. Info: (323) 442-4065

#### Thursday, Aug. 22

8 a.m. - 5 p.m. USC Center for Excellence in Research Workshop. "Managing a Scientific Laboratory," various speakers. UPC: Davidson Conference Center Board Room. Info: (213) 740-6709

3 p.m. USC School of Pharmacy White Coat Ceremony. Pappas Quad. Info: (323) 442-1369

#### Friday, Aug. 23

8:30 a.m. Medicine Grand Rounds. "Shock II," Kamyar Afshar, USC. IRD 732-734. Info: (323) 226-7923.

Noon. Center for Applied Molecular Medicine Seminar. "Progress and Prospects for Organ Regeneration," Shay Soker, Wake Forest University. CSC 250. Info: (323) 442-3849

#### Tuesday, Aug. 27

5 p.m. Women's Cancers Program Monthly Research Seminar. "While You Study the Fingerprints, I Will Identify the Serial Killer: Ovarian Cancer Pathology Overview,' Paulette Mhawech-Fauceglia, USC. NOR 7409. Info: (323) 865-0801

#### Wednesday, Aug. 28

**8 a.m.** 12th Annual Moving Targets Symposium – The American Association of Pharmaceutical Scientists. "Neurodegenerative Disease: Therapeutic Challenges & Opportunities," various speakers. Radisson Hotel, Los Angeles Midtown, 3540 S. Figueroa St., Los Angeles. Info: (323) 442-1369

8:30 a.m. Medicine Grand Rounds. "Introduction to Clinical Research," Alex Balekian, USC. IRD 732-734. Info: (323)

**Notice:** Deadline for calendar submission is 4 p.m. Monday to be considered for that week's issue—although three weeks' advance notice of events is recommended. Please note that timely submission does not guarantee an item will be printed. Send calendar items to *The* Weekly, KAM 400 or fax to (323) 442-2832, or email to eblaauw@usc.edu. Entries must include day, date, time, title of talk, first and last name of speaker, affiliation of speaker, location and a phone number for information.



**CLEAN HANDS = DISEASE PREVENTION** Hundreds of people joined in a demonstration in proper hand hygiene given by members of Keck Medical Center of USC at a health fair on July 28. The demonstration at La Placitas Our Lady of Guadalupe Church in Los Angeles offered participants the chance to learn about how careful hand washing can go a long way to prevent infections and illness, said Infection Control Coordinator Graciela Medina. To show how important vigorous washing is, participants rubbed a phosphorous lotion on their hands. They then washed their hands and held them under a black light to show areas they missed. Among the health-care providers joining Medina at the hand-washing booth were Christina Tam, Sharon Lee, Sandro Perez, Cynthia Stender and Amelia Basconcillo. The Community Grants and Sponsorship Program of Keck Medical Center of USC was a sponsor of the fair.

#### SIMULATION: Students practice in real settings

#### Continued from Page 1

include three distinct facilities scattered across the Health Sciences Campus. These facilities include an inanimate laboratory that houses a virtual operating room, an animate facility and a fresh-tissue dissection laboratory.

The three labs offer vastly different opportunities, not only for students, but also for residents and seasoned doctors from every discipline who want to learn a new technique or practice an old one. "Having three facilities allows us to design the most optimal training environment" said Sullivan.

The inanimate lab features laparoscopic and endoscopic simulators, a virtual operating room, a simulation suite and numerous bench models for practicing procedures. The animate lab provides the opportunity to work on live animal models mimicking full surgical procedures.

The third facility is the fresh-tissue dissection lab. This unique part of the program is run in partnership with the LAC + USC Medical Center, and provides access to cadavers utilized for resident education. Recently, a perfused model has been developed to completely simulate the realism of surgical procedures. Understanding the real benefits of improving patient safety, LAC+USC has provided a generous grant allowing all residents at LAC+USC the ability to benefit from this unique educational resource.

"Our various training facilities provide an opportunity to expose physicians to invasive skills at an earlier time in their training. We expect

this will create more qualified and competent physicians and improve patient safety and outcomes in the future," added Craig Baker, MD, vice chair of surgical education and program director for thoracic surgery.

Although many of the tools available are high tech, a simulation is any procedure that is done in a nonclinical setting with the goal of learning and honing procedural skills. "It can be tying knots with a piece of rope," said Sullivan. "It can be suturing on a pig's foot. You don't need the highest technology to teach the simple skills."

"It's not just going through the motions, these simulators model real life procedures and allow trainees to gain proficiency in a nonstressful environment," said simulation specialist Mike Minneti. "They have to use the needle in the same way it would be done in a clinical setting."

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# In case of an emergency...

Call the Emergency Information Phone: (213) 740-9233 The emergency telephone system can handle 1,400 simultaneous calls. It also has a backup system on the East Coast.

Visit the USC Web: http://emergency.usc.edu This page will be activated in case of an emergency. Backup Web servers on the East Coast will function if the USC servers are incapacitated.