



From top: Keck School graduates listen as Andrew C. Ghatan delivers the student address; graduate Angela Covington and daughter Jocelyn celebrate with friends; Jason Schiffman, shown after receiving the Irving I. Lasky, M.D., Memorial Award for outstanding research at the Keck School's senior awards ceremony on May 17, enjoys the moment (his son, less so).



NEWEST GRADS, READY FOR TAKE-OFF—Above, graduate Rian Hasson jumps for joy following the Keck School of Medicine's commencement on May 18.

HSC kicks off graduation celebration

By Katie Neith

Keck School Dean Carmen A. Puliafito graduated his first class of medical students during commencement ceremonies for the Keck School of Medicine on May 18, marking an important milestone for both the graduates and for his first year of service at the School.

Some 168 graduates received their Doctor of Medicine degrees in the ceremony at the Shrine Auditorium. Five of those graduates received a joint degree with a Master of Business Administration, and one received a Doctor of Philosophy in conjunction with a medical degree.

The Health Sciences campus celebrated additional commencement ceremonies, graduating M.S., Ph.D. and M.P.H. students on May 14. Graduation ceremonies for Biokinesiology and Physical Therapy, Dentistry, Occupational Science and Occupational Therapy, the Physician

Assistant Program and the School of Pharmacy were held on May 16.

At the Keck School ceremony, Puliafito kicked off his speech by recognizing the support of friends and family, thanking those who truly made medical school possible for the students.

He then called on the graduates to be heroes in their field and invoked the spirit of Oskar Schindler, a man who risked his life and fortune to protect his workers from the Nazis.

"Every day of your professional life, whatever your specialty, you will have the opportunity to be a hero," said Puliafito. "You will encounter patients and their families at the most difficult moments in their lives—as they confront mental illness, or cancer, or blindness, or some incalculable loss. They will be utterly dependent upon your talent and compassion. You cannot let them down."

He closed his speech with words

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USC taps medical center expert Mitchell Creem as Vice Provost

By Jon Nalick

University officials have named Mitchell R. Creem, an experienced administrator widely known for his experience in revitalizing academic medical centers, to the new position of vice provost, effective June 1.

Provost C. L. Max Nikias, announced the appointment in a May 16 letter to the campus community and said Creem would provide crucial expertise as the University negotiates to reacquire USC University Hospital and USC Norris Cancer Hospital from Tenet Healthcare Corporation.

"Vice Provost Creem will provide expert leadership and guidance, drawing on his vast experience... I am confident he will serve as an invaluable resource for the university during this transitional time," Nikias said.

Creem, who will report directly to the Provost, comes to USC with a decade of success in turning around academic medical centers and with a stellar track record of achievements at the teaching hospitals of UCLA, Harvard University and Tufts University.



Mitchell R. Creem

"His reputation and his accomplishments have earned him praise nation-wide, and his dynamic leadership will certainly accelerate the university's growth—and ensure its prominence—at the fore of medical education," Nikias stated.

Creem will work in close collaboration with the Office of the Provost and Keck School of Medicine Dean Carmen A. Puliafito and his leadership team. During the transition, he will be primarily focused on due diligence, negotiations, operational planning, capital planning and financing

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Photos © Lisa Brook Photography

USC emergency medicine expert presses state legislators to preserve hospital 'safety net'

By Meghan Lewit

At a recent meeting with state legislators, Edward Newton, chair of the Department of Emergency Medicine at the Keck School of Medicine, stressed the importance of Los Angeles County hospital system as a crucial "safety net" for uninsured patients.

At the May 2 Assembly Health Committee hearing, Newton emphasized that the system, including the LAC+USC Medical Center, must be preserved to deliver on "a promise society makes to its members—that in the event of a calamity, you will be provided with care."

He added during his testimony: "Public hospital emergency rooms provide a disproportionate amount of this safety net care."

The hearing, held at the California Science Center and chaired by Assemblyman Mervyn Dymally (D-Compton), focused on the impact of hospital and emergency room closures in the county. The closure of 15 hospitals since 1998—including Martin Luther King Jr.-Harbor Hospital last summer—has greatly increased the burden on existing facilities, health officials and experts reported.

Medical residents in public hospitals

provide a very large share of the safety net, particularly in some subspecialty areas such as orthopedics, Newton said.

In response to the increasing demands and the decreasing number of inpatient beds elsewhere, the Department of Emergency Medicine at the LAC+USC Medical Center has adapted its own practices to provide inpatient care more efficiently, he said.

For example, the department has created a Chest Pain Unit and an Observation Unit at the medical center. The units provide an observation area to monitor patients who are at low risk for heart attack and more efficiently rule out cardiac disease.

The department also recently implemented a plan to address hospital overcrowding by developing predetermined responses to varying levels of overcrowding, he said.

Since implementing this system two months ago, the amount of time the emergency department considered "dangerously overcrowded" has decreased from 30 percent to less than one percent.

In order to preserve the safety net in California, a statewide plan should be implemented, Newton advised.



Edward Newton (second from left), chair of the Department of Emergency Medicine, awaits his turn to testify at the May 2 Assembly Health Committee hearing.

Lawmakers will have to allocate funds to keep county hospitals open, and salaries will need to be competitive with the private sector in order to retain physicians, he said.

Newton also recommended that federal Homeland Security funds be used to increase inpatient capacity to prepare for a disaster. The advantage of these funds that they could be used every day

to some extent as flexible capacity in hospitals rather than buying tents and trailers that will remain in storage indefinitely.

A major earthquake could flood county emergency rooms with as many as 10,000 new patients, he said.

"Preserving the county hospital system is key to making sure the safety net survives," Newton said.

GRADS: HSC celebrates annual rite

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inscribed on a ring that was given to Schindler by his workers at the end of the war, calling them a very fitting reminder of what being a doctor is all about: "He who saves one life it is as if he has saved the entire world."

To view a transcript of the dean's remarks, visit: <http://www.usc.edu/uscnews/stories/15287.html>.

A commencement address was given by Sammy Lee, otolaryngologist and 1947 graduate of the Keck School. Lee is also an Olympic gold medalist in diving.

In addition, numerous awards were presented at the ceremony, including the Elaine Stevely Hoffman Service Award given each year in recognition of longstanding contributions and supreme dedication to the Keck School of Medicine and its people.

This year's recipient of the Hoffman Award was Donald I.

Feinstein, professor of medicine, with more than 40 years of service to the Keck School of Medicine, the USC/Norris Comprehensive Cancer Center and USC.

"Today we are awarding the Hoffman Award to a true hero of USC Medicine," said Puliafito, who presented the award to Feinstein. "He is an exemplar of academic medicine—a great teacher and an internationally recognized scholar and a world-class clinical hematologist."

The School of Pharmacy celebrated commencement at the HSC Quad. Honored were 178 new Pharm.D.s, 42 MS recipients, 12 Ph.D.s, 32 residents and 4 fellows. Speakers included Dean R. Pete Vanderveen, Class President Ashley Thompson, and Professor Irving Steinberg, Steven Chen and Mary Gutierrez. The commencement address was delivered by Professor Mel Baron.

Stem cell study details novel self-renewal mechanism

USC researchers have discovered a new mechanism to allow embryonic stem cells to divide indefinitely and remain undifferentiated.

The study, which was published in the May 22 issue of the journal *Nature*, also reveals how embryonic stem cell multiplication is regulated, which may be important in understanding how to control tumor cell growth.

"Our study suggests that what we believe about how embryonic stem cell self-renewal is controlled is wrong," said Qi-Long Ying, assistant professor of Cell and Neurobiology at the Keck School of Medicine of USC, researcher at the Eli and Edythe Broad Center for Regenerative Medicine and Stem Cell Research at USC, and lead author of the paper. "Our findings will likely change the research direction of many stem cell laboratories."

Contrary to the current understanding of stem cell self-renewal and differentiation, the findings suggest that embryonic

stem cells will remain undifferentiated if they are shielded from differentiation signals. By applying small molecules that block the chemicals from activating the differentiation process, the natural default of the cell is to self-renew, or multiply, as generic stem cells.

"This study presents a completely new paradigm for understanding how to grow embryonic stem cells in the laboratory," said Martin Pera, director of the Eli and Edythe Broad Center for Regenerative Medicine and Stem Cell Research at USC. "The discovery has major implications for large-scale production of specialized cells, such as brain, heart muscle and insulin-producing cells, for future therapeutic use."

Embryonic stem cells have only been derived from a very small number of species.

"We believe the process we discovered in mice may facilitate the derivation of embryonic stem cells from species like

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Ultrasound-plus-mammography combination boosts breast cancer detection, study shows

In a new study of women at increased risk for breast cancer, adding an ultrasound examination to routine mammography revealed 28 percent more cancers than mammography alone.

However, the ultrasound exam substantially increased the rate of false positive findings and unnecessary biopsies, according to the study published in the May 14 issue of the *Journal of the American Medical Association*.

The Keck School of Medicine of USC was one of 21 participating sites.

The study enrolled 2,809 women at increased risk for breast cancer; the research data from 2,637 of these women were eligible for analysis.

Criteria used to determine an increased breast cancer risk included participants who were 25 years or older

with a prior atypical breast biopsy and personal and/or moderate family history of breast cancer.

Forty women were diagnosed with breast cancer within 12 months of the

detection rate of 11.8 women per 1,000 women screened. Eight of the 40 cancers were not seen with either mammography or ultrasound at the time of the initial screening but were discovered

suspicious was seen on the ultrasound which, as the result of a biopsy, turned out not to be cancer."

The Department of Radiology at the Keck School of Medicine, led by department chair Edward Grant, has been a leader in this critically important research, she noted.

The American Cancer Society recently recommended that certain women at very high risk for breast cancer be screened with magnetic resonance imaging in addition to mammography, and these results do not change that recommendation.

Women should talk with their doctor about their breast cancer risk profile and whether an ultrasound exam supplemental to mammography might be beneficial, keeping in mind the potential for a false positive result and an unnecessary biopsy.

At present, there is a limited supply of trained personnel and facilities offering ultrasound. Women also should consult their health insurance policies regarding the coverage for breast cancer screening options.

An annual mammogram is still recommended. Neither MRI nor ultrasound is meant to replace mammography.

The study was made possible through funding from a novel private-public partnership between the Avon Foundation and the National Cancer Institute, part of the National Institutes of Health.

'When discussing the option of supplementing mammography with screening ultrasound with women, it will be important to alert them about the increased risk of having a biopsy due to a false positive exam.'

— Linda Hovanessian, associate professor of radiology at the Keck School of Medicine

initial screening. Mammography alone revealed 20 cancers (50 percent of all cancers detected) for a detection rate of 7.6 women per 1,000 women screened, though one cancer was dismissed.

The combination of mammography plus ultrasound revealed 31 cancers (78 percent of all cancers detected) for a

later during the 12-month period for a rate of three cancers missed per 1,000 women screened.

The risk of incurring an unnecessary biopsy due to a false positive exam result from the supplemental ultrasound also was substantially increased in the study.

Mammography alone prompted an unnecessary biopsy for one in 40 women. The combination of mammography and ultrasound prompted an unnecessary biopsy for one in 10 women, or four times more women having an unnecessary biopsy.

According to Linda Hovanessian, associate professor of radiology at the Keck School of Medicine and site principal investigator for the study, "For women at elevated risk of breast cancer, we learned that ultrasound finds cancers not seen by mammography.

"However, we also learned that there is a significantly higher false-positive rate associated with the addition of an ultrasound exam. This means something

USC Kidney Dialysis Center honors Akmal

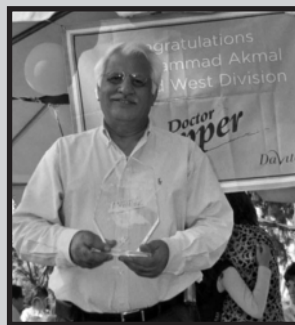
Officials of the DaVita-USC Kidney Dialysis Center have named the Mohammad Akmal, professor of medicine at the Keck School of Medicine, recipient of the center's 2008 Pepper Award.

The award, which recognizes excellence in patient service, integrity and clinical results, is given each year to a physician who exemplifies DaVita's mission and values and who participates in the center's Patient Enrichment Program.

Lea Dee, facility administrator at the center, said Akmal deserved the award because he served as "the driving force behind the facility's excellent clinical results."

Additionally, Dee added, "letters from patients, housekeepers, nurses, patient care technicians, and other ancillary staff provided proof of his excellent service to patients and employees. He assists dietitians, social workers, nurses, and other employees in improving all core metrics so patients will have a better quality of life."

The DaVita-USC Kidney Center is a large dialysis clinic with 43 stations located in Los Angeles, CA. The for-profit facility is operated by El Segundo-based DaVita, which runs other dialysis facilities.



Mohammad Akmal

In Case of An Emergency...

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.

Call the Emergency Information Phone: 213-740-9233

The emergency telephone system can handle 1,400 simultaneous calls. It also has a back up system on the East Coast.

CREEM: Bringing 25 years of management experience in healthcare industry

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strategies, clinical programming, and strategic planning. He also will ensure the smooth integration of university policies and resources.

Creem currently serves as the associate vice chancellor and chief financial officer for the UCLA Medical Sciences, a group of institutions that includes the Geffen School of Medicine at UCLA, UCLA Faculty Practice, and the UCLA Hospital System.

In this capacity, he has responsibility for a combined budget of more than \$2 billion, with over \$400 million in medical science research.

In addition, he served briefly as interim chief information officer for UCLA Medical Sciences, where his primary

focus was on developing the information technology strategy and transition plan for the new hospital buildings.

With 25 years of management experience, Creem has covered all aspects of the healthcare industry, including hospital, research, and faculty group practice management.

Before joining UCLA, he was chief financial officer for the Beth Israel Deaconess Medical Center, a Harvard teaching hospital with an annual budget of \$1 billion, and the Tufts-New England Medical Center, a Tufts University teaching hospital.

The two medical centers were in significant financial distress when he assumed the CFO position, but he implemented their turnaround plans,

leading each from significant operating losses to profitability within two years. In each case, employee morale improved significantly, as did patient and referring physician satisfaction.

Creem also has held several key administrative and financial positions at Massachusetts General Hospital in Boston, where he helped launch two for-profit subsidiaries in international telemedicine services and hardware/software sales.

He also worked for several years in a senior management position at the Healthcare Practice Group of PricewaterhouseCoopers, where he was responsible for numerous consulting engagements, financial statement audits and financial feasibility studies. In the

hospital and healthcare sector, he has considerable experience with business valuation and pricing strategies; organizational, financial and governance structures; strategies for clinical and operational consolidation; bankruptcies and reorganizations; and healthcare startups.

He holds a master's degree in Health Administration from Duke University and a B.S. in Accounting and Business Administration from Boston University. He has served on numerous boards of community hospitals and hospital and physician joint ventures.

Additionally, he has been a guest lecturer at USC, UCLA and Harvard University. He is currently a visiting professor at the UCLA School of Public Health.

Calendar of Events

The HSC Calendar is online at www.usc.edu/hsccalendar

Tuesday, May 27

11 A.M. "Vitamin D Deficiency," William Malone. HMR 100. Info: (323) 442-2806

Wednesday, May 28

NOON. Renal Grand Rounds. "Resistant Hypertension," Mitra K. Nadim, USC. GNH 6441. Info: (323) 226-7307

Friday, May 30

8 A.M. Pathology and Laboratory Medicine Grand Rounds. "Clinical Application of Therapeutic Apheresis," Joshua Levy, HemaCare Corp. NOR 7409. Info: (323) 442-1180

Monday, June 2

NOON. Fellows' Core Curriculum Conference. "Renal Physiology (Acid Base Regulation by Kidney) – Part III," Alicia McDonough, USC. GNH Drs. Dining Rm. A & B. Info: (323) 226-7307

Wednesday, June 4

NOON. Renal Grand Rounds. "Dyslipidemia and PTH," Mohammad Akmal, USC. GNH 6441. Info: (323) 226-7307

Sat., June 7

9 A.M. "Prostate Cancer Screening and Epidemiology," David Penson, USC. KAM

Mayer Aud. Info: (323) 442-2555

10 A.M. "Treatment of Localized Disease," Eila Skinner, USC. KAM Mayer Aud. Info: (323) 442-2555

11:15 A.M. "Novel Therapies for Advanced Disease," Tanya Dorff, USC. KAM Mayer Aud. Info: (323) 442-2555

Monday, June 9

NOON. Fellows' Core Curriculum Conference. "NEPHSAP: Fluid, Electrolyte and Acid-base Disturbances," Alan Yu, USC. GNH Drs. Dining Rm. A & B. Info: (323) 226-7307

NOON. Transplant Conference. "Optimizing Outcomes in Kidney Transplant Recipients," Mike Bunnapradist, UCLA. GNH 6441. Info: (323) 226-7307

Wednesday, June 11

NOON. Renal Grand Rounds. "Peritoneal Dialysis," Saeid M. Nosrati, USC. GNH 6441. Info: (323) 226-7307

Friday, June 13

11 A.M. "The Role of Selectins in Cancer Metastases," Ajit Varki, UC San Diego. GNH 14-441. Info: (323) 865-3914

Monday, June 16

NOON. Fellows' Core Curriculum Conference. "Psychosocial Issues of Organ Donation and Transplantation," Susana Dahdul, USC. GNH Drs. Dining Rm. A & B. Info: (323) 226-7307

Wednesday, June 18

NOON. Renal Grand Rounds. "Sympathetic Reactivity," Jeanie Park, USC. GNH 6441. Info: (323) 226-7307

Monday, June 23

NOON. "NEPHSAP: Ca/Phos/Vit D/PTH in CKD," Mirosław Smogorzewski, USC. GNH Drs. Dining Rm. A & B. Info: (323) 226-7307

NOON. "Transplant Conference," Various Transplant faculty. GNH 6441. Info: (323) 226-7307

Wednesday, June 25

NOON. Renal Club Lecture. "Podocyte Survival," Stuart Shankland, Univ. of Washington. GNH 6441. Info: (323) 226-7307

Friday, June 30

8:30 A.M. "Maternal Transmission of Asthma Risk," Lester Kobzik, Harvard. GNH 11-321. Info: (323) 226-7923

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 HSC Weekly, KAM 400 or fax to (323) 442-2832, or e-mail to ebalauw@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.

Philanthropist Harlyne Norris receives honorary degree

In recognition of her service, generosity and guidance to USC and numerous organizations that support children, health care, medical research, education and the arts, the University has honored philanthropist and USC trustee Harlyne J. Norris as a Doctor of Humane Letters.

Norris, executive vice president of the investment firm KTN Enterprises, received the honorary degree—the highest of commencement awards—on May 16 as part of the main USC graduation ceremony.

Her family is well-known for its longtime dedication to USC and community enhancement. Norris has been a USC trustee since 2000, and she is a trustee and past chairman of the Kenneth T. and Eileen L. Norris Foundation, which was established in 1963 by her husband's parents, Kenneth Sr. and Eileen Norris.

Through the Norris Foundation, the Norris family has given nearly \$50 million to USC. The Harlyne J. Norris Cancer Research Tower within the USC/Norris Comprehensive Cancer Center on USC's Health Sciences campus is named in her honor.



Harlyne J. Norris

CELLS: Study shows how development is regulated

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pigs, cows or other large animals, which have not been done before," continued Ying. "If deriving embryonic stem cells from cows, for instance, is possible, then perhaps in the future cows might be able to produce milk containing medicines."

With better understanding of the multiplication process of embryonic stem cells, researchers have additional insight on tumor cell growth as these cells share similar qualities. "Our study reveals part of the little-known process of how embryonic stem cells multiplication is regulated. This is important for us in understanding how to control tumor cell growth moving forward in cancer research," said Ying.

This research was funded by the

Medical Research Council and the Biotechnology and Biological Sciences Research Council of the UK, the Canadian Institutes of Health Research, and by the European Commission Framework VI project EuroStemCell. Co-authors are Philip Cohen, a Royal Society Research Professor at the University of Dundee and Austin Smith, a Medical Research Council Professor at the University of Cambridge.

Qi-Long Ying, Jason Wray, Jennifer Nichols, Laura Batlle-Morera, Bradley Doble, James Woodgett, Philip Cohen and Austin Smith. "The Ground State of Embryonic Stem Cell Self-Renewal," *Nature* (2008). Doi: 10.1038/nature06968.

SAVE THE DATE

The Patient Education and Outreach Center and Jennifer Diamond Cancer Resource Library in the Harlyne J. Norris Cancer Research Tower will open on June 5 at 3:30 p.m. Please save the date for the reception and ribbon cutting ceremony to celebrate this state-of-the-art facility with print and electronic cancer education and resource materials devoted to patients, their families and community members seeking information on cancer. For event information visit www.usc.edu/esvp (code: Patient) or call (213) 740-1744.

HSC NEWSMAKERS

Complete listing at: www.usc.edu/uscnews/usc_in_the_news/

A May 19 *Los Angeles Times* article quoted Childrens Hospital Los Angeles' dermatologist **Justine Park** about the safety and quality of microdermabrasion home kits.

A May 19 *San Francisco Chronicle* ran an op-ed urging California to tighten diesel emission standards and cited environmental health expert **James Gauderman's** study on lung function.

On May 19, *Medpage Today* article quoted cardiologist **Leslie Saxon** about a report that pacemakers don't prevent arrhythmia in mild heart failure.

A May 19 *Los Angeles Times* quoted medical ethics expert **Ron Ben-Ari** about how TV ads for prescription drugs have affected the doctor-patient relationship, encouraging patients to ask for specific drugs.

On May 19, the *Los Angeles Times* ran an obituary remembering **Charles Goldstein** of the USC School of Dentistry.

A May 16 *Science News* article quoted fertility expert **Richard Paulson** about new techniques to help identify which embryos are viable for pregnancy.

USC Health Sciences
Public Relations
1975 Zonal Ave.
KAM 400
Los Angeles, CA 90033

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