Keck Medical Center implements new EMR system

By Josh Grossberg

With hands-on training of a new electronic medical record system well underway, Keck Medical Center of USC is a step closer to eliminating most paperwork, as well as improving patient experience.

Several years in the works, KeckCare is now being implemented at Keck Hospital of USC and USC Norris Comprehensive Cancer Center and Hospital.

Joshua Lee, chief information officer of USC Health, said “KeckCare provides a vehicle to facilitate the transformation occurring all across Keck Medical Center of USC. By encouraging multi-disciplinary care and providing real-time clinical information and decision support tools as our providers document and manage care on our patients, KeckCare inherently makes care safer and more patient centered. This continuum of care record spans inpatient and outpatient care and makes a true ‘online USC home’ for all of our patients and providers.”

In June, a group of staff members received training in KeckCare, and the response was overwhelmingly positive. “We had zero critical issues,” said Terry Pickering, director of nursing informatics. “We had very successful staff engagement, and feedback has unanimously been overwhelmingly positive.”

With training Phase 1B now being implemented, project manager Jeannie Arnold said that workers are quickly getting the hang of the new system and are enthusiastic about what they’re learning. “People acknowledge it’s different, but they’re catching on,” she said.

Those receiving training work in clinical inpatient documentation, nursing, physical therapy, occupational therapy, speech therapy, clinical nutrition, respiratory therapy, social work and spiritual services.

Workers were taking to the new system so quickly that Arnold said the number of people who are calling for help dropped dramatically in the days since its June 4 rollout. “One idea behind KeckCare is to have all patient information available by computer at any hospital location.”

Upcoming phases of the rollout will include physician documentation and outpatient documents.

Pickering credited people working across departments to make the process so smooth. And he said the level of collaboration among nursing and other clinical departments demonstrates the medical center’s progress on its “Magnet journey.” The Magnet Recognition Program from the American Nurses Credentialing Center is a prestigious citation that recognizes quality patient care, nursing excellence and innovation.

“The interdisciplinary collaboration associated with KeckCare implementation speaks volumes to our organization’s readiness for Magnet,” Pickering said. “This project has created a groundswell of positive collaboration between nurses and others.”

One of the boons of KeckCare is hospital chaplain the Rev. Phil Manly. “Now we will become more of a high-tech hospital,” he said. “Even from a chaplain’s perspective, I will be able to get more quality time at the bedside. I went from 35 forms I had to get off the computer to seven pages.”

Keck School alumnus Mitchell Lew named USC trustee

By Annette Moore

Physician, health care entrepreneur and longtime USC volunteer Mitchell W. Lew has been elected to the USC Board of Trustees. Lew is CEO of Prospect Medical Systems, an independent physician association with a network of primary care physicians, specialists and affiliated hospitals throughout Los Angeles, Orange and Riverside counties.

In May 2012, Lew became the first Asian-American president of the USC Alumni Association Board of Governors. Previously, he served as president of the USC Asian Pacific Alumni Association (APAA) from 2009 to 2011.

“Mitchell Lew is an accomplished physician, a far-sighted businessman and an extraordinary Trojan,” said USC President C. L. Max Nikias. “His dedication to advancing our academic mission, and to raising awareness about USC’s accomplishments in teaching, research and community service, is unfailing. I look forward to his contributions as a member of our Board of Trustees.”

Lew, who holds a bachelor’s degree in biological sciences from the USC Dornsife College of Letters, Arts and Sciences and a Doctor of Medicine from the Keck School of Medicine of USC, worked for 10 years in private practice in obstetrics and gynecology before moving to the business side of medicine. Recognizing the need for better-organized and more cost-efficient health care delivery systems, he founded Genesis Healthcare, a Southern California provider of medical services organization. As president and CEO, Lew built Genesis into a major player in the Orange County market before selling it to Prospect in 2005.

Lew has also worked to shape the delivery and management of health care through his involvement with the California Association of Physician Groups, which is dedicated to improving health care quality and value. His passionate involvement with the Trojan Family extends across the university. Lew serves on the Board of Directors at USC Dornsife and the USC Associates Board of Directors. He and his wife, Deena ‘85, also a USC graduate, have established scholarships with the APAA and at USC Dornsife, and they are benefactors of programs such as the university’s Joint Educational Program and the Lew Distinguished Visiting Innovator program at the USC Annenberg, School for Communication and Journalism.

Gift of $90,000 makes the little things possible

By Amy E. Hamaker

The little things are what the Office of Patient and Family Experience at the Keck Medical Center of USC is all about.

The Patient Experience team welcomes and visits every patient within 24 hours of admission. During these visits, the staff answers any questions the patients or family members may have, checks on issues like staff responsiveness and room cleanliness, and makes sure that patients and their families feel cared for at USC’s hospitals. These initial connections help foster communication and trust between patients, their families and the medical care teams.

This concept is so important to Scott Bosés and his wife, Celesta Pappas-Bosés, that they recently gave a $90,000 gift to help expand the Patient Experience Program at the Keck Medical Center of USC. In addition, the office will be renamed the Scott Bosés and Celesta Pappas-Bosés Patient and Family Experience.

As one of the hospitals’ Pillars of Excellence, Patient Experience is designed to enhance both patient satisfaction and employee engagement while supporting quality, compassionate care and excellent customer service.

“A few months ago, a young couple wanted to renew their wedding vows, but because of medical issues, the ceremony needed to happen very quickly,” recalled Diane Lapa, director of Patient Relations at the Keck Medical Center. Lapa and her team orchestrated a beautiful ceremony right in the patient’s hospital room and provided a minister, wedding cake and flowers.
**USC study links childhood infections to shorter adult height**

**By Josh Grossberg**

The frequency of childhood infections is a determinant of adult height, according to a new study recently conducted by a team of researchers from the Keck School of Medicine of USC led by Wendy Cozen, professor of preventive medicine and pathology, and conducted by Annie Hwang, postdoctoral fellow.

The study, published in the April issue of the *American Journal of Epidemiology*, is important because increased height is positively associated with some types of cancer, including breast cancer and lymphoma, and negatively associated with cardiovascular disease and stroke.

According to Cozen, genetic factors are determinants of adult height, but nongenetic factors can also contribute. "Researchers assumed that taller height was a surrogate measure for improved childhood nutrition, including higher fat and protein. But we suspect that cumulative childhood exposure to infection also plays a role in determining adult height, and thus may be an underlying causal factor for some adult diseases correlated with height."

Other researchers from the Keck School included Thomas M. Mack, professor of preventive medicine and pathology; Ann S. Hamilton, associate professor of preventive medicine; W. James Gauderman, professor of preventive medicine; Myles G. Cockburn, associate professor of preventive medicine; statistician John Zadnick; and postdoctoral fellow Kristin A. Rand.

Identical twins who differed in height by at least one inch were identified from a cohort of California-born twins in a database developed and maintained by Mack and colleagues. From interviews with the twins’ mothers, the investigators found that the twin who had more infections was twice as likely to be the shorter twin. "The effect was especially strong for infections in the toddler years. While height itself does not cause illness, it can act as a signpost of risk of other conditions — including some cancers — that may be traced back to childhood infections. "The significance isn’t about height per se," Hwang said. "Height is used as a surrogate for other adult diseases."

The study is adjusted to take nutrition, weight and other factors into account.

Other studies have looked at the relationship between childhood infections and growth in developing countries in areas of extreme poverty, but this research suggests that a connection also exists in "a generally healthy, economically developed country." According to the authors, a possible explanation for the effect is diversion of energy from the growth process toward fighting infection. "Because the balance between energy allocated for immune function and growth must be carefully maintained, ill children may spend their energy fighting infection instead of increasing long bone length, resulting in shorter adult height," the report states.

The study may offer new leads on the importance of childhood experiences in adult characteristics and possibly adult disease.

---

**Physician departures reflect well on Keck faculty strength**

**By Josh Grossberg**

Showing that the reputation of the Keck School of Medicine of USC is well regarded in the national medical community, three top doctors in their fields have been recruited for prestigious chairmanships at other institutions.

Ophthalmologist Rohit Varma will be leaving his position as professor in the Keck School and chief of corneal surgery at Keck Medical Center of USC to accept a tenured position as chair of Surgical Disciplines at Central Michigan University School of Medicine.

Rohit Varma left his position as associate professor of ophthalmology and has accepted the chair of the Department of Ophthalmology and Visual Sciences at the University of Illinois at Champaign-Urbana.

And Eda Skinner has left her post as associate professor of clinical urology to become chair of the Department of Urology at the Stanford School of Medicine.

Colleagues said all three will be missed. "Vaughn Starnes, chair of the Department of Surgery and surgeon-in-chief at the USC hospitals, said that while he wished Senagore had stayed, he knows that his new colleagues in Michigan will be in good hands."

"Dr. Senagore has demonstrated a skillful balance of leadership, administration, educational and research roles during his time at USC and has been a role model for all," Starnes wrote in a memo to the surgery faculty.

Ronald Smith, chairman of the Department of Ophthalmology, praised Varma’s research. "He was a particularly productive clinician and scientist," Smith said. "He’s one of the world’s leading ophthalmic epidemiologists today."

Skinner had been a member of the Department of Urology for more than 20 years. "She was a leader in our bladder cancer team and also on the national scene," said Indeberh Gill, chair- and professor of the Catherine and Joseph Aresty Department of Urology and founding executive director of the USC Institute of Urology. "Her selection as chair of urology at Stanford is definitely a feather in her cap and also ours."

Smith said the appointments reflect well on the Keck School. He noted that among graduates from the ophthalmology department training programs, there are 10 sitting chairs in the United States and another 26 outside the country.

"One of the measures of excellence of any academic medical center is the success of their graduates and alumni," he said.

---

**The Weekly**

**Next Issue: July 12**

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.

**Associate Vice President, Health Sciences Public Relations and Marketing:** Deborah S. Fullerton

**Executive Director of Communications:** Ina Fried

**Assistant Director of Publications:** Sara Reeve

**Editor:** Jon Nalick

**Contributors:** Ryan Ball, Eva Blaauw, Tania Chatila, Josh Grossberg, Amy E. Hamaker, Carol Matthieu, Annette Moore, Leslie Ridgeway and Alison Trinidad

**Vice President, Public Relations and Marketing:** Brenda Maceo

---

**HOMORING EXCELLENCE—Mary Nichols (right), chair of the California Air Resources Board, presented the board’s Haagen Smit Award to Andrea M. Nicks, professor of preventive medicine at the Keck School of Medicine of USC, on May 31. The award honors individuals who have made significant contributions toward improving air quality through their lifetime commitment, perseverance, leadership and innovation in the areas of research, environmental policy, science technology, public education or community service.**

---

**At USC celebrates the 40th anniversary of the USC Norris Comprehensive Cancer Center. The Weekly will run in each issue through the end of the year with special content highlighting key moments in the history of the institution.**

On May 10, 1979, ground is broken for the new site of the Kenneth Norris Jr. Cancer Research Institute. At the time, the effort was described as the "largest building project in the 99-year history of the University."

In remarks to the assembled crowd, Norris noted that cancer is a disease with widespread impacts. "It is a horrible, terrible disease and it’s got to be beaten," he said. "I think of it in terms of war — that we’re going to wage a relentless war on this disease with and with the staff and the talent that we have, I see no reason why we can’t make perhaps the major breakthrough here."

Norris concluded his remarks by tying his support of the cancer center to his family’s history of supporting USC. "This does represent a continuation of the family tradition of support of USC — which we think is a great University — and more specifically to the development of this Health Sciences Campus, and to the facility which will rise here in the next few years."
From the brain,” said Alzheimer’s disease-like symptoms has been shown to βIV. The clearing of Aβ peptide (Aβ) in the circulatory system was reduced by 60 to 80 percent. After three months of treatment, mice treated with the mutant protein showed that Aβ levels in the hippocampus, cortex, and cerebrospinal fluid were reduced by 60 to 80 percent, and cerebral blood flow responses and hippocampal function were improved.

According to Zlokovic, the research “presents us with a new therapeutic approach for Alzheimer’s disease based on prevention or removal of Aβ deposition in the brain. … It has a great therapeutic potential.”

Plans to develop LRPIV as a therapeutic agent for the treatment of Alzheimer’s disease are underway by ZZ Alike, a Houston-based biotechnology company founded by Zlokovic and USC benefactor Selim Zilkha.

The research was supported by the National Institutes of Health (AG023084 and AG057137).

By Sara Reeve

A USC team of scientists has published research that highlights a new potential therapeutic agent for patients with Alzheimer’s disease.

Researchers from the Zilkha Neurogenetic Institute at the Keck School of Medicine of USC have found that a mutant protein helps to bind amyloid beta peptide in the brain more efficiently than a wild type — or naturally occurring — version. Amyloid beta peptide (Aβ) is a primary component of amyloid plaques — deposits found in the brains of Alzheimer’s disease patients — and most researchers believe it plays a central role in the development of Alzheimer’s.

The study, published May 24 in the Journal of Biological Chemistry, Berislav Zlokovic, director of the Zilkha Neurogenetic Institute, and colleagues demonstrate that the protein LRPIV-D3674G significantly improved Aβ clearance compared to the wild-type cluster IV mutant.

“Learning about the LRPIV-D3674G mutant Aβ clearance offers a new angle that might help us to develop a therapeutic agent for Aβ,” said Zlokovic. “LRPIV works as a peripheral binding agent for Aβ and binds Aβ in the circulation without the need of crossing the blood-brain barrier. It creates a ‘sink’ for Aβ in the blood, which promotes Aβ efflux from brain to blood.”

The study, a “lipoprotein receptor cluster IV mutant preferentially binds amyloid-beta and regulates clearance from the mouse brain,” led by Abhay Sagare, assistant professor of research at the Keck School, showed that the mutant protein cleared Aβ in the mouse brain 25 to 27 percent better than the wild-type version. After three months of treatment, mice treated with the mutant protein showed that Aβ levels in the hippocampus, cortex, and cerebrospinal fluid were reduced by 60 to 80 percent, and cerebral blood flow responses and hippocampal function were improved.

According to Zlokovic, the research “presents us with a new therapeutic approach for Alzheimer’s disease based on prevention or removal of Aβ deposition in the brain. … It has a great therapeutic potential.”

Plans to develop LRPIV as a therapeutic agent for the treatment of Alzheimer’s disease are underway by ZZ Alike, a Houston-based biotechnology company founded by Zlokovic and USC benefactor Selim Zilkha.

The research was supported by the National Institutes of Health (AG023084 and AG057137).
Don Harper Mills, a longtime clinical professor of pathology and psychiatry at the Keck School of Medicine of USC, died May 21. He was 85.

Mills, who taught at the Keck School and was a past president of Sarneri Collegium, was also a practicing attorney. He served as medical director of the County of Los Angeles Medical Malpractice Program, devoted to claims management for the public hospitals and clinics in the county.

Mills was a past president of the American College of Legal Medicine and a Distinguished Fellow and past president of the American Academy of Forensic Sciences. He participated in the development of the academy's code of ethics and was chairman of the Ethics Committee for many years.

As a member of the editorial board of the Journal of Legal Medicine, Mills wrote numerous articles in the medical-legal field. He was on the first editorial board for the Journal of the American Medical Association in the 1970s. He is survived by his wife of 64 years, Lillian, his two children and their spouses, and his four grandchildren.

In lieu of flowers, the family has requested donations be made to the Don Harper Mills Scholarship Fund at the Keck School of Medicine of USC: keck.usc.edu/DonHarperMills.

Each year, more people die of lung cancer than of breast, prostate and colon cancers combined because most patients are diagnosed after the cancer has already become advanced. The Multi-disciplinary Lung Cancer Program at the Keck Medical Center of USC is fighting to change that, which is why it is offering low-dose CT (LDCT) scans of the chest for lung cancer screening at a reduced cost of $99.

The recent National Lung Screening Trial conducted by the National Cancer Institute has shown that screening high-risk individuals using LDCT scanning can reduce lung cancer-related mortality. The trial involved more than 53,000 individuals between the ages of 55 and 74 years old, who were current or former smokers. The study established that LDCT screenings detected significantly more patients with lung cancer than standard chest X-rays and that LDCT screenings were associated with a 20 percent reduction in lung cancer-related mortality.

Candidates for the LDCT screening include men and women between the ages of 55 and 74 who have smoked an equivalent of one pack of cigarettes a day for 30 years, current and former smokers who have quit within 15 years, and others who have significant lung disease, exposure to certain toxins or radiation, or a family history of lung cancer.

To ensure proper follow-up care to patients, specialists in chest radiology, thoracic surgery, pulmonary medicine and oncology also worked on getting a prosthetic leg and hopes to be back to her normal routine soon. And she will keep her new necklace close by. “It’s beautiful,” she said. “When people see it, I’ll get to tell them that the level of care here exceeded my expectations.”

For patients, a thoughtful gesture makes all the difference

By Josh Grossberg

Jennifer Sutherland gently touched the beaded necklace as it was clasped around her neck. A piece of jewelry could hardly make up for what she had been through, but the gesture and the thought behind it made her cry softly.

Don Harper Mills

In Memoriam: Don Harper Mills, 85

Don Harper Mills, a longtime clinical professor of pathology and psychiatry at the Keck School of Medicine of USC, died May 21. He was 85.

Mills, who taught at the Keck School and was a past president of Sarneri Collegium, was also a practicing attorney. He served as medical director of the County of Los Angeles Medical Malpractice Program, devoted to claims management for the public hospitals and clinics in the county.

Mills was a past president of the American College of Legal Medicine and a Distinguished Fellow and past president of the American Academy of Forensic Sciences. He participated in the development of the academy's code of ethics and was chairman of the Ethics Committee for many years.

As a member of the editorial board of the Journal of Legal Medicine, Mills wrote numerous articles in the medical-legal field. He was on the first editorial board for the Journal of the American Medical Association in the 1970s. He is survived by his wife of 64 years, Lillian, his two children and their spouses, and his four grandchildren.

In lieu of flowers, the family has requested donations be made to the Don Harper Mills Scholarship Fund at the Keck School of Medicine of USC: keck.usc.edu/DonHarperMills.

Each year, more people die of lung cancer than of breast, prostate and colon cancers combined because most patients are diagnosed after the cancer has already become advanced. The Multi-disciplinary Lung Cancer Program at the Keck Medical Center of USC is fighting to change that, which is why it is offering low-dose CT (LDCT) scans of the chest for lung cancer screening at a reduced cost of $99.

The recent National Lung Screening Trial conducted by the National Cancer Institute has shown that screening high-risk individuals using LDCT scanning can reduce lung cancer-related mortality. The trial involved more than 53,000 individuals between the ages of 55 and 74 years old, who were current or former smokers. The study established that LDCT screenings detected significantly more patients with lung cancer than standard chest X-rays and that LDCT screenings were associated with a 20 percent reduction in lung cancer-related mortality.

Candidates for the LDCT screening include men and women between the ages of 55 and 74 who have smoked an equivalent of one pack of cigarettes a day for 30 years, current and former smokers who have quit within 15 years, and others who have significant lung disease, exposure to certain toxins or radiation, or a family history of lung cancer.

To ensure proper follow-up care to patients, specialists in chest radiology, thoracic surgery, pulmonary medicine and oncology also worked on getting a prosthetic leg and hopes to be back to her normal routine soon. And she will keep her new necklace close by. “It’s beautiful,” she said. “When people see it, I’ll get to tell them that the level of care here exceeded my expectations.”

For patients, a thoughtful gesture makes all the difference

JUNE 21 • 2013

In Memoriam: Don Harper Mills, 85

Don Harper Mills, a longtime clinical professor of pathology and psychiatry at the Keck School of Medicine of USC, died May 21. He was 85.

Mills, who taught at the Keck School and was a past president of Sarneri Collegium, was also a practicing attorney. He served as medical director of the County of Los Angeles Medical Malpractice Program, devoted to claims management for the public hospitals and clinics in the county.

Mills was a past president of the American College of Legal Medicine and a Distinguished Fellow and past president of the American Academy of Forensic Sciences. He participated in the development of the academy's code of ethics and was chairman of the Ethics Committee for many years.

As a member of the editorial board of the Journal of Legal Medicine, Mills wrote numerous articles in the medical-legal field. He was on the first editorial board for the Journal of the American Medical Association in the 1970s. He is survived by his wife of 64 years, Lillian, his two children and their spouses, and his four grandchildren.

In lieu of flowers, the family has requested donations be made to the Don Harper Mills Scholarship Fund at the Keck School of Medicine of USC: keck.usc.edu/DonHarperMills.

Each year, more people die of lung cancer than of breast, prostate and colon cancers combined because most patients are diagnosed after the cancer has already become advanced. The Multi-disciplinary Lung Cancer Program at the Keck Medical Center of USC is fighting to change that, which is why it is offering low-dose CT (LDCT) scans of the chest for lung cancer screening at a reduced cost of $99.

The recent National Lung Screening Trial conducted by the National Cancer Institute has shown that screening high-risk individuals using LDCT scanning can reduce lung cancer-related mortality. The trial involved more than 53,000 individuals between the ages of 55 and 74 years old, who were current or former smokers. The study established that LDCT screenings detected significantly more patients with lung cancer than standard chest X-rays and that LDCT screenings were associated with a 20 percent reduction in lung cancer-related mortality.

Candidates for the LDCT screening include men and women between the ages of 55 and 74 who have smoked an equivalent of one pack of cigarettes a day for 30 years, current and former smokers who have quit within 15 years, and others who have significant lung disease, exposure to certain toxins or radiation, or a family history of lung cancer.

To ensure proper follow-up care to patients, specialists in chest radiology, thoracic surgery, pulmonary medicine and oncology also worked on getting a prosthetic leg and hopes to be back to her normal routine soon. And she will keep her new necklace close by. “It’s beautiful,” she said. “When people see it, I’ll get to tell them that the level of care here exceeded my expectations.”

Calendar of Events

Thursday, June 27

6:30 p.m. - 8 p.m. Health Matters: USC Physicians Discuss Health Topics You Care About. “To Hear Again,” John Niparko. University Club of Pasadena, 175 N. Oakland Ave., Pasadena. RSVP and Info: (323) 442-2835

Saturday, July 13, 2013

8:30 a.m. - 5:30 p.m. Short Courses: Clinical and Translational Research, Jonathan Samet. NRT Anxiety Conference Room LG103. Info and registration: (323) 442-6281

Thursday, Aug. 8 - Friday, Aug. 9

7:30 a.m. - 4 p.m. 4th Annual Pain Management Symposium. Registration is currently open for the upcoming continuing medical education course. NRT Anxietyt Auditorium. Info and registration: (323) 442-2555

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.

In case of an emergency...

Call the Emergency Information Phone: (312) 740-5323 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.

At USC, the University’s Public Relations and Marketing Office is the central point of contact for the media. For more information, contact Jon Nalick at (213) 740-5134 or by email at jnalick@usc.edu.