

The Weekly

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CHLA wins prestigious 'Leapfrog' award for second consecutive year

'The top-notch Keck School physicians and the administrators at Children's Hospital Los Angeles continually raise the bar for quality patient care, and we are extremely proud to be affiliated with some of the leading hospitals in the nation.'

**—Keck School of Medicine Dean
Carmen A. Puliafito**

For the second consecutive year, Children's Hospital Los Angeles has made The Leapfrog Group's list of top hospitals in the nation.

Children's Hospital, which is staffed by Keck School of Medicine physicians, is the only children's hospital in the western United States recognized this year, and one of only seven children's hospitals in the United States to receive the honor.

The Leapfrog Group, a coalition of public and private purchasers of employee health coverage, gave Children's Hospital an overall quality score of 97 out of 100, far exceeding the average score of 56 for hospitals in California and the national average score of 50.

Carmen A. Puliafito, Dean of the Keck School, commented, "The Leapfrog Group has once again confirmed what we at USC and the Keck School of Medicine have known for a long time. The top-notch Keck School physicians and the administrators at Children's Hospital Los Angeles continually raise the bar for quality patient care, and we are extremely proud to be affiliated with some of the leading hospitals in the nation."

Richard D. Cordova, president and CEO of Children's Hospital Los Angeles, added, "This recognition by The Leapfrog Group is a testament to the hard work of our Board of Trustees and our Safety, Quality and Services Committee, which oversees quality management at our hospital, as well as our many physicians, nurses and clinical staff."

The Leapfrog Group's annual list of top hospitals was announced Dec. 1 in Washington, D.C., at the organization's 10th anniversary meeting. The selection is based on the results of Leapfrog's national survey measuring hospitals' performance in crucial areas of patient safety and quality. The results are made public at www.leapfroggroup.org.

Children's Hospital is one of America's premier teaching hospitals and has been affiliated with the Keck School of Medicine of USC since 1932.

One of eight children's hospitals in the country named to the *U.S. News & World Report* Honor Roll earlier this year, the hospital is preparing for the July 2011 opening of a \$636 million, 317-bed state-of-the-art facility that will further expand services and capabilities at its campus on Sunset Boulevard in Hollywood.



Leslie Ridgeway

Inderbir Gill, right, performs laparoscopic surgery with the use of augmented reality, assisted by Casey Ng, left. The technology enhances the surgeon's ability to see where the tumor is located, enabling him to avoid the kidney's blood supply and other obstacles.

Keck School surgeon breaks new ground in kidney-sparing surgeries

By Leslie Ridgeway

Two groundbreaking surgeries recently performed at USC University Hospital by a team of surgeons led by Keck School of Medicine of USC Professor Inderbir Gill have allowed two patients who might otherwise have lost their kidneys to keep the organs, with the likelihood of resuming their normal lives.

Gill, founding director of the USC Institute of Urology, is the first in the world to use robotic surgery to repair a rare renal artery aneurysm in a patient who had only one kidney.

The patient, Cecile Johnson of Bartlesville, Okla., faced the possibility of renal failure if she didn't undergo the surgery.

"If I had to make the same decision to do this today, I'd do it again," said Johnson, 51, who has lived with one kidney since age 17. "I had total trust in Dr. Gill to do this procedure. If there is anyone in the world who could do this surgery, it would be him and his team."

In another surgery the same week, Gill removed a two-centimeter tumor from inside another patient's right kidney using augmented reality, a technology that helps the surgeon to visualize precisely where the tumor is located, enabling the surgeon to avoid the kidney's blood supply and other obstacles.

"This patient had a 70 percent chance of losing his kidney," said Gill. "Using the augmented reality technique made this particular surgery possible. We were able to remove the tumor and save 95

percent of the kidney, without ever stopping the kidney's blood supply, using a new 'zero-ischemia' technique."

In the case of the renal artery aneurysm, Johnson was referred to Gill by another physician after experiencing pain in her side and high blood pressure. An angiogram revealed a 2.4 centimeter aneurysm on her remaining kidney, most likely caused by fibromuscular dysplasia, a condition in which abnormal cells grow inside an artery, causing narrowing and compromised blood flow to organs.

Originally, Gill had planned to remove the kidney, repair the diseased artery, and put the kidney back in the patient—essentially, an auto-transplant procedure. But after thinking some more, another idea emerged.

"I asked Mrs. Johnson, 'What if we can eliminate the aneurysm robotically, without having to remove the kidney?'" he said. "It had never been done before in a patient with a solitary kidney anywhere in the world, but with our vast experience in robotic kidney-sparing surgery, we knew she was the perfect candidate for this new procedure."

Gill used robotic technology to dissect the blood vessels feeding the kidney, isolating the aneurysm and blocking its blood supply. Having isolated the aneurysm, Gill removed it and repaired the artery.

"That was what I wanted all along," said Johnson, who works as a supervisor in human resources at Conoco Phillips. "When you only have

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Tania Chatila

ALL WRAPPED UP FOR THE HOLIDAYS

USC University Hospital surgical nurses Glenis Wansley and Kelly Cooke, stroll through the hospital halls with hot cocoa and cardinal-and-gold scarves as part of the annual holiday gift give-away tradition for all employees of the USC hospitals. The event, on Dec. 7, recognizes employees' contributions throughout the year.

CTSI awards \$700,000 to fund wide range of pilot programs

‘Research development is the engine that powers the transformation we are charged to facilitate.’

—Carlos Pato, director of the CTSI’s Office of Research Development

By Katie Neith

Building upon an increased focus on translational research at USC, the Los Angeles Basin Clinical and Translational Science Institute (CTSI) has awarded a total of \$700,000 to 24 pilot grants recipients. Based at the Keck School of Medicine, the CTSI received a \$56.8 million grant from the National Institutes of Health last summer to accelerate the pace at which research discoveries are translated into clinical practice.

Principal investigators and their collaborators include many multidisciplinary teams and represent a wide variety of institutions, schools and departments, including the Keck School of Medicine of USC and Children’s Hospital Los Angeles.

Pilot grants awarded by the CTSI Office of Research Development support a range of projects, from pre-clinical

development of novel diagnostics and therapeutics to community-based research that will ultimately improve patient and community health.

“One of the main goals of the CTSI is to promote the development and conduct of new clinical and translational research. The pilot grant program is the centerpiece of our plans to achieve this goal,” said Thomas A. Buchanan, director of the CTSI and associate dean for clinical research at the Keck School of Medicine. “We were able to provide funds for 24 projects that represent a wide range of translational research directed at a wide range of health problems that matter here in Los Angeles. We look forward to moving more projects forward with future CTSI pilot funding.”

According to Carlos Pato, director of the CTSI’s Office of Research Development

and professor and chair of Department of Psychiatry and Behavioral Sciences at the Keck School, 205 applications for pilot grants were received.

“Investigators were given a short period to propose a project and describe their proposed plans for development of their translational research,” he said. “Given the short turn around we expected a much smaller number of applications. The response was extraordinary.”

Pato said 80 top applicants were chosen based on feasibility, innovation and relation to the CTSI’s strategic focus. They were then reviewed by an executive committee, which chose the final 24. These teams are characterized by both their translational focus and their multidisciplinary nature.

“Research development is the engine that powers the

transformation we are charged to facilitate,” said Pato.

He said a major aim is to fund pilot projects that facilitate new translational work from new investigators, as well as established investigators who, with this support, move into the translational arena.

“We are particularly interested in fostering the development of new interdisciplinary teams that bring new approaches to translational research—biologists working with engineers and chemists, behavioral scientists working with film makers or artists—things like that,” said Buchanan. “We want to see new approaches that go beyond traditional biomedicine and are applied to important problems in urban health.”

A full list of pilot grant recipients is available online at: tinyurl.com/2gy4reb.

John E. Bryson named chair of Keck School Board of Overseers

President C. L. Max Nikias has appointed John E. Bryson, former chairman and CEO of Edison International, the parent company of Southern California Edison, as the new chair of the Keck School of Medicine Board of Overseers.

The board serves as an advisory group to the Keck School leadership. Its priority is helping the school leadership develop and implement a plan to become one of the top 10 medical schools in the nation.

Bryson succeeds David Lee, who has served as the chair of the Keck Board of Overseers since 2001.

Bryson, a resident of San Marino, Calif., is a graduate of Stanford University and Yale Law School. He serves as a director of The Boeing Company, W.M. Keck Foundation and The Walt Disney Company.

He is one of the founders of the Natural Resources Defense Council, a national environmental action group. Bryson also is the former chair of the California State Water Resources Board and former president of the California Public Utilities Commission.

The Keck Board of Overseers meets three times per year to hear updates on the school’s strategic plan, learn about key programs, support the Keck School’s philanthropic efforts and serve as ambassadors for the Keck School.



DISCUSSING DISEASES OF THE DEVELOPED WORLD—Jared Diamond (right), a renowned scientist and author, speaks to attendees of the Dean’s Translational Research Seminar on Dec. 2 about “Salt, Sugar, Sloth, and Fat: Our Current World Epidemic of Non-Communicable Diseases.” Diamond, a professor of geography and physiology at UCLA, spoke about the relationship between a Western lifestyle of unlimited food availability and lack of exercise, and the leading causes of death—diabetes, heart disease, stroke and some cancers. He explored examples of countries—such as China and India—where recent wealth has led to the adaptation of a more Western lifestyle, which quickly led to epidemics in non-communicable diseases. He also noted that when wealth was lost and certain populations reverted to their native style of living, cases of non-communicable diseases dropped off as well. “These are diseases that kill us with our own permission,” said Diamond. Michael Goran (in the background), professor of preventive medicine and director of the USC Childhood Obesity Research Center, hosted the event.

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The Weekly ETCETERA

Stanley Azen, professor and co-director of biostatistics in the Department of Preventive Medicine, was the keynote speaker at the Western Users of SAS Software 2010 Conference in San Diego. His presentation, “The Role of SAS in Facilitating New Biomedical Discoveries,” emphasized the power of SAS to support research in biomedical discoveries, population-based studies leading to public health innovations, and health promotion in the aging population.

More than 300 people

attended the keynote presentation, which received rave reviews. Azen also was the featured pianist at the evening reception.

The Western Regional Society of Nuclear Medicine has named **Hossein Jadvar**, associate professor of radiology and biomedical engineering, a “Distinguished Scientist” and formally honored him at the organization’s meeting Oct. 21 in Anaheim.

He also served as General Chair and Scientific Chair at the meeting.

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Hundreds flock to USC-sponsored 5K for prostate cancer awareness

By Valerie Zapanta
Hosted by the USC Institute of Urology and USC Norris Cancer Hospital, the LA Prostate Cancer 5k was held on Sunday, Nov. 21. With more than 700 runners and walkers, the event was successful in accomplishing its goals of creating awareness for prostate cancer and raising funds to support prostate cancer research.

Carmen Puliafito, dean of the Keck School of Medicine of USC; Inderbir Gill, founding executive director of the USC Institute of Urology; Dallas Raines, ABC7 meteorologist; and Tom LaBonge, Los Angeles Council District 4, welcomed the crowd and congratulated them for supporting the fight against prostate cancer.

Recent prostate cancer survivor Stephen Macht also addressed the crowd saying, “For my health and for my family’s wellbeing, I thank Dr. Gill, his surgical and urological teams, his pathologists and all



Left, the USC Institute of Urology team gathers after the Nov. 21 race, which wended through Brentwood and attracted hundreds of walkers and runners. Right, a race participant and her canine partner cross the finish line.



With more than 700 runners and walkers, the event was successful in accomplishing its goals of creating awareness for prostate cancer and raising funds to support prostate cancer research.

SURGERY: Novel technology helps maximize the chances of saving patient’s kidney

Continued from page 1
one kidney, one of your worst fears is that something will go wrong with it.”

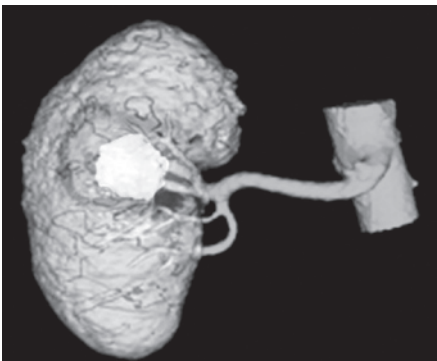
In the augmented reality procedure, Gill and his team operated on Gary Fradkin, 58, a Van Nuys resident who had the unusual experience of being diagnosed with tumors on both kidneys.

“I never felt bad,” said Fradkin, a postproduction engineer who develops theatrical trailers. “During a routine physical, my creatinine level was elevated. During ultrasound, the doctors spotted the tumors. The urologist said the tumor in my right kidney was in the middle of the arterial blood supply. He said it was beyond his expertise and referred me to Dr. Gill.”

Gill planned a laparoscopic procedure, in which four small cuts are made in the patient’s abdomen so that special surgical instruments can be inserted to enable the surgeon to reach the kidney.

Gill and his team have performed more than 1,200 minimally invasive kidney-sparing surgeries, but rarely on tumors embedded entirely inside the kidney.

Gill’s team for this surgery included Casey Ng, Mukul Patil, Masashiko Nakamoto (a computer engineer) and Osamu Ukimura, director of Image-Guided Surgery and Focal Therapy at the Keck School. Ultra-fine CT scans, with half-millimeter cuts, were used to develop a comprehensive three-dimensional image



An augmented reality computer image of the tumor inside the patient’s kidney helped guide the surgery.

of the kidney.

“Normally I look at a CT scan on a monitor to make an impression in my head of where the tumor is,” Gill said. “The novel aspect of this procedure is that we were able to see the tumor cradled in the blood supply of the kidney on the computer screen. A normal

CT scan can’t show where the blood vessels are. If we don’t know where they are, we can’t save them.”

Nakamoto and Ukimura worked for more than two weeks to develop the 3-D image. With the image guiding him, Gill located the tumor, and while continuing blood flow to the rest of the healthy kidney, removed the tumor without compromising the kidney’s function. This new surgery, zero-ischemia partial nephrectomy, developed by Gill, has been performed by Gill’s team on more than 50 patients to date.

Gill, Nakamoto and Ukimura are currently working on

expanding augmented reality to allow the 3-D image of the kidney to be superimposed on top of the live picture of the kidney during surgery, providing an even better guide.

“As we refine this technology, we hope that many urologists will be able to use this novel technology to maximize the chances of saving the patient’s kidney in cases where patients have complex tumors,” Gill said.

Tests revealed that Fradkin’s cancer was completely removed, and he is recovering with good kidney function. An avid windsurfer and snowboarder, he said he was looking forward to getting back to normal activities, including training his German shepherd to compete in agility trials.

The Weekly NEWSMAKERS

A Nov. 30 *Los Angeles Downtown News* story reported that the USC Norris Comprehensive Cancer Center has been designated a Phase 1 Clinical Trial Center of Excellence by the pharmaceutical company, Bristol-Myers Squibb Company.

A Nov. 30 article in the *Pasadena Star-News* quoted **Edward Grant**, chairman, Department of Radiology, on the amount of radiation emitted by full-body scanners at airports. The story also appeared in the *San Bernardino Sun*, *Whittier Daily News* and *Redlands Daily Facts*.

A Dec. 2 *Los Angeles Daily News* article reported that **Inderbir Gill**, director of the USC Institute of Urology, recently became the first doctor in the United States to use augmented reality technology during kidney surgery. The procedure, performed at USC University Hospital, allowed Gill to remove a hard-to-reach tumor, allowing the patient to keep the kidney. During surgery Gill used a vivid, detailed 3-D picture to find the tumor and blood vessels flowing into it. “This is the latest step in this surgery and we feel this is going to be the gold standard,” Gill said. *The Daily Breeze* and the *Daily Trojan* also covered the story.

A Dec. 2 *Business Wire* story noted that for the second consecutive year, Children’s Hospital Los Angeles has earned the Top Hospital designation from The Leapfrog Group, which annually recognizes the best hospitals in the nation for providing the safest and highest quality health care services to patients.

A Dec. 2 Web MD story featured a study led by **Leslie Saxon**, chief, division of cardiovascular medicine, and published in the medical journal, *Circulation*. The study followed more than 100,000 patients across the US who have implanted cardiac devices—cardiac resynchronization therapy (CRT) devices and implantable cardioverter-defibrillator (ICD) devices. The study examined survival rates among those patients with wireless-enabled devices and those with no wireless-enabled tracking. MobiHealth News also covered the study.

A Dec. 2 *Des Moines Register* story highlighted a study by **Michael Goran**, director of the USC Childhood Obesity Research Center, which found that the sweeteners in Coca-Cola and Pepsi contain more fructose than consumers have been led to believe.



NIKI NIKIAS HONORED AT HOLIDAY CELEBRATION—The USC Norris Comprehensive Cancer Center Auxiliary honored USC First Lady Niki Nikias at a luncheon at the Caltech Athenaeum on Dec. 6. At the event above are (from left): Kandi Wopschall, Auxiliary president; Peter A. Jones, director of the cancer center; Nikias; and Lorna Reed, USC trustee.

Calendar of Events

This Calendar of events is also online at www.usc.edu/hscalendar for the Health Sciences Campus community

Tuesday, Dec. 13

Noon. KSOM Research Seminar. “Discovery of Hallmark Amyloid Plaques in Alzheimer’s Disease Retina: A Window to the Brain for Early Diagnosis and Treatment Assessment,” Maya Koronyo-Hamaoui, Cedars-Sinai. NRT LG 503/504. Info: (323) 442-7732

Tuesday, Dec. 14

8 a.m. Pathology and Laboratory medicine Grand Rounds. “Better Pathology Through Informatics: Frozen Section Management,” John Sinard, Yale. HMR 100. Info: (323) 442-1180

10:30 a.m. USC Hospital Guild Holiday Speaker Series. “Seeing Better,” Mark Humayun, USC. DEI 3200. Speaker series is complimentary, optional lunch \$30. Info: (323) 254-0600

Noon. Pharmacology and Pharmaceutical Sciences Seminar. “Novel Technologies for Target and Drug Discovery,” Demin Zhou, Peking Univ. PSC 104. Info: (323) 442-1902

Noon. Cancer Center Grand Rounds. “GEWIS! Scaling Up From Candidate Pathway Studies to Gene Environment-wide Interaction Studies and Whole Genome Sequencing Studies,” Duncan Thomas, USC. NRT Aresty Aud. Info: (323) 865-0801

Noon. Psychiatry Grand Rounds. “The Effects of Violence Exposure on Children,” Gayla Margolin, USC. ZNI 112. Info: (323) 442-4065

Thursday, Dec. 16

Noon. USC Research Center for Liver Disease. “Population-based Discovery of Toxicogenomics Biomarkers for Hepatotoxicity,” Ivan Rusyn, Univ. of North Carolina. HMR 100. Info: (323) 442-1283

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 e-mail 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.

Chaudhary honored as ‘Outstanding Investigator’

By Sara Reeve

Preet Chaudhary, chief of the Jane Anne Nohl Division of Hematology and Center for the Study of Blood Diseases at the Keck School of Medicine, will receive the Outstanding Investigator award from the Western Society for Clinical Investigation at the society’s regional meeting to be held in January.

Chaudhary, who also serves as professor of medicine at the Keck School of Medicine, co-leader of the Leukemia and Lymphoma Program and associate director for translational research at the USC Norris Comprehensive Cancer Center, is an internationally renowned physician-scientist. His research interests in-

clude several areas of cancer, including AIDS-associated cancers, cancer drug resistance, biology of normal and leukemic hematopoietic stem cells, programmed cell death and cellular signaling.

“He is an outstanding investigator and division chief who is highly deserving of this prestigious award,” said Edward Crandall, the Hastings Professor and Norris Chair of Medicine at the Keck School of Medicine. “This is one more recognition of the high quality of research taking place here at the Keck School.”

Peter A. Jones, director

of the USC Norris Comprehensive Cancer Center, said, “Preet Chaudhary is an exceptional physician scientist who received his training at the best institutions and worked with outstanding mentors. He has established a highly funded research program which is doing cutting-edge work at the same time as he continues with his clinical work. The cancer center considers itself very fortunate to have a person of his acumen leading the division of hematology and we are thrilled that he has been recognized by his peers in this way.”



Preet Chaudhary

Keck School partners with Eisenhower Medical Center

By Imelda Valenzuela

The Keck School of Medicine of USC and the Eisenhower Medical Center in the Palm Desert community of Rancho Mirage celebrated their new partnership with a reception hosted by Keck School Dean Carmen A. Puliafito and Eisenhower President and Chief Executive Officer G. Aubrey Serfling at the Rancho Las Palmas Resort and Spa Nov. 14.

Over 75 guests attended the reception including administrators and faculty from both the Keck School and Eisenhower, friends and alumni of the Keck School, and several Palm Desert community members.

Puliafito gave a speech focused on personalized medicine and community-based medical education—the core of the collaboration between the Keck School and Eisenhower.

“What we are seeing is a change in the way medical students are being educated with community-based medical education,” said Puliafito. “That is, having medical students, interns and residents work at community hospitals that have created a teaching environment; this is really going to help the way in which we deliver health care in a smart way.” He noted that the Keck School and Eisenhower are building an educational alliance “at every level.”

Puliafito also emphasized



Seated, from left: Eisenhower Medical Center Board of Trustees member Philip E. Hixon and his wife Helene A. Hixon Standing: USC Board of Trustees honorary member Helene Galen and her guest James Kabler.

groups of patients,” said Puliafito.

“This is important because as we scientifically discover what’s unique about different diseases, we can develop targeted therapies for patients and treat them without a high degree of toxicity.” He stated that more personalized and specific medical treatments will be developed over the next 25 years.

Additional strategic community educational alliances are under way between the Keck School and Huntington Hospital in Pasadena and Hoag Memorial Hospital in Newport Beach.

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