HSC News

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USC University of Southern California

USC surgeon performs first-of-its-kind robotic kidney surgery

By Leslie Ridgeway

Surgeons at the USC Institute of Urology, part of Keck Medicine of USC, recently used a Food and Drug Administration (FDA)cleared laparoscopic device, the high intensity focused ultrasound (HIFU) surgical ablation system to ablate intra-abdominal tumors. The system enables surgeons to penetrate the abdominal cavity with keyhole cuts to eliminate tumors of four centimeters or less.

Inderbir Gill, MD, founding executive director, USC Institute of Urology, and chairman and professor, Catherine and Joseph Aresty Department of Urology at the Keck School of Medicine of

USC, performed the surgery on patient Gary Fradkin, a 62-year-old Van Nuys resident, who went home the same day, three to four days less than patients typically experience with kidney cancer surgery.

"Using a focused beam of ultrasound directly on the tumor and minimally invasive surgery, we destroyed the tumor without surgically removing it from the body," Gill said. "The most important aspects of this technology are the reduced trauma to the patient and the ability to save the kidney, without the tumor, for a healthier lifestyle post-surgery. This surgery offers fewer chances for infection and postoperative complications. Our goal is to save as much of the good kidney tas possible and help patients return to a normal lifestyle quickly."

According to the American Cancer Society, nearly 64,000 new cases of kidney cancer will occur in 2014, of which nearly 14,000 Americans will die from the



ty au

cancer is one of the 10 most common cancers in men and women and has been on the increase since the 1990s. A typical patient at an average age of 65. Some

disease. Kidney

Inderbir Gill

research indicates the possible increase may be because of improved imaging tests. Yet, while diagnoses are increasing, survival rates are also increasing, especially among expert surgeons using advanced technology.

HIFU surgery is an option for patients whose tumors are four centimeters or smaller, which accounts for about 10 percent of all kidney tumors, Gill said. Although this surgery was on a kidney, HIFU surgery can also be an option for cancer of the prostate, liver, pancreas and other organs.



Is there a doctor on the house? Noah Merin, hematology/oncology fellow at USC Norris Cancer Hospital, recently commissioned a mural on the side of his house in Lincoln Heights to highlight the prevalence of leukemia in the Hispanic community. The colorful image depicts Mesoamerican-themed characters wearing long feathered headdresses in consultation — one character is a physician with a stethoscope and the other is a patient. In the background, cancerous cells emerge alongside healthy red blood cells from a wide blood vessel. Working with local artist Bruce Silkwood, Merin commissioned and helped design the artwork.

USC physicians are first to implant new wireless device to manage heart failure

By Leslie Ridgeway

Keck Medicine of USC is the first medical center in Southern California, post-Food and Drug Administration (FDA) approval, to implant a new wireless device for heart failure patients. The device is designed to reduce readmissions to the hospital and empower patients to be involved in their own health information.

The CardioMEMS Heart Failure System, made by St. Jude Medical, is a tiny wireless sensor, powered by radiofrequency energy that is implanted into the pulmonary artery (PA) with minimally invasive surgery. The sensor tracks PA pressure through short, daily readings that the patient conducts using a special pillow with an antenna. Physicians access the readings on a secure website. Clinical trials conducted prior to FDA approval demonstrated a 30

"This device is a game changer for heart failure

Open enrollment runs now through Nov. 14

By Talar Shahinian

The open enrollment period for benefitseligible faculty and staff of the University is taking place now through Nov. 14, and employees are encouraged to choose Keck Medicine of USC physicians by signing up for the USC Network Medical Plan.

This plan gives you access to Keck Medicine of USC physicians who are leaders in their fields, including those at the USC Norris Comprehensive Cancer Center, where patients have access to the latest treatment and clinical trials.

You also have a choice of physicians and convenient locations at competitive costs. Keck Medicine of USC has grown exponentially, with locations in areas where staff and faculty live and work, including multi-specialty clinics in Downtown Los Angeles, Pasadena, Beverly Hills and La Cañada Flintridge. Many Keck Medicine of USC physicians have practices throughout Southern California, specializing in primary care, obstetrics/ gynecology, surgery, oncology/hematology and urology.

A multi-specialty clinic at University Park Campus (UPC), on the fourth floor of the Engemann Student Health Center, is also a convenient option for staff and faculty working at UPC. The office is open 8 a.m. to noon and from 1-5 p.m. with same-day appointments available. Services provided there include dermatology, primary care, lab blood draw, orthopaedic surgery, endocrinology, gynecology and rheumatology. In addition, USC Eye Institute locations now offer general ophthalmology services and take VSP insurance.

These locations include Los Angeles,

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percent reduction in hospital readmissions. David Shavelle, MD, associate professor of clinical medicine at the Keck School of Medicine of USC, implanted the device in patient Alfredo Delatorre, 71, of La Puente, Calif. on Oct. 15, 2014.

"This device is a game changer for heart failure patients," said Shavelle. "Before this device, we made medication changes based upon a patient's symptoms and changes in their weight Changes in pressures within the heart often occur prior to the onset of a patient's symptoms. The pivotal CHAMPION See **HEART**, page 4

patients."

— David Shavelle, associate professor of clinical medicine at the Keck School of Medicine of USC

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USC rolls out the cardinal carpet for guests on Stem Cell Awareness Day

By Cristy Lytal

When asked why stem cell research matters, guests at this year's Stem Cell Awareness Day gave many creative answers. "Because it has unlimited potential to treat human diseases." "Because every part of us except the soul comes from stem cells."

"Because it's the future."

Held on October 8 at the Eli and Edythe Broad CIRM Center for Regenerative Medicine and Stem Cell Research at USC, this annual open house attracted more than 100 guests ranging from high school students to patients to alumni.

All the guests had the



From left, visiting scholar Guangfang Wang, PhD candidate Keerthi Boddupally and research associate Vicky Yamamoto from the Keck School of Medicine of USC show that stem cell science is cool.

opportunity to enjoy stem cell-inspired paintings, sculpture and images; tour the labs; view research posters; participate in a wide array of fun activities; and nibble on light refreshments. They also mingled with researchers and faculty at this event hosted by USC Stem Cell and the California Institute for Regenerative Medicine.

"Our public events give us the opportunity not only to educate our friends and supporters about the research that we do here at USC, but also to come face to face with the real-world significance of our work," said Andy McMahon, PhD, FRS, who spearheads the university-wide USC Stem Cell initiative. "Whether it's a patient hoping for a cure, a clinician waiting for better treatments or an average citizen dreaming of a brighter future, every person who comes to our events is a reminder of the urgency of our mission - to translate discoveries to cures."

Keck Medicine of USC surgeons use robot to perform innovative endovascular procedures

By Hope Hamashige

For the first time on the West Coast, surgeons from the Keck School of Medicine of USC used a robot to perform two endovascular procedures on two separate patients on Sept. 30.

"It was a success and we are excited about its prospects in more complex endovascular procedures," said Sung Wan Ham, MD, assistant professor of surgery, division of vascular surgery, who performed the back to back angioplasty and stenting of an occluded femoral artery using the Magellan robot.

Endovascular procedures use minimallyinvasive techniques that typically involve manipulating a guide wire and preformed catheters through blood vessels to access different parts of the body. This process can be difficult and lengthy, particularly in patients with challenging vascular anatomy.

The robot allows the physician to control a guide wire, catheter, and supporting sheath from a centralized remote workstation. This allows for precise navigation even through difficult bends in the vasculature, which can reduce procedure times.

Shortening the time in the endovascular

suite, noted Ham, benefits both patients and surgeons by reducing the amount of time they are exposed to radiation, from imaging equipment.

Fred Weaver, MD, MMM, chief of the division of vascular surgery and endovascular therapy, said the technology is a boon for patients at Keck Medicine of USC, which is the fifth medical center in the U.S., and the first on the west coast, to have this type of robot. "We are literally on the cutting edge of the endo applications with this," said Weaver.

Weaver added there are potentially more applications for this robot, including coiling aneurysms in the brain, assisting with chemoembolization and to help urologists navigate the ureter.

For now, the robot is only being used for endovascular procedures and the outcomes so far are heartening. The lack of blood flow in his legs, a result of his blockage, prevented Ham's first patient from walking at times. Afterward, Ham found a pulse in his patient's foot that wasn't there before.

"We are excited by the outcome of this initial procedure. We hope many more patients will benefit from this technology," he said.

Keck School honors top teachers

The Keck School of Medicine of USC Dean's Recognition Ceremony was held Sept. 24 on campus. Honorees included:

Outstanding Teaching as a Resident Rayhan Lal, MD, Pediatrics Daniel Martinez, MD, Medicine Barbara Rubino, MD, Medicine Allison Speer, MD, Surgery

Outstanding Teaching in ICM

Year I: Bartlett Saunders, MD Year II: Howard Cantwell, MD, Steve Morrison, MD

Outstanding Teaching in PPM

Richard Clark, MD, Otolaryngology Mark Katz, MD, Family Medicine Ankit Shah, MD, Pediatrics

Year I Faculty Teaching Awards

Gene Albrecht, PhD, Cell & Neurobiology Rayudu Gopalakrishna, PhD, Cell & Neurobiology Michael Habib, PhD, Cell & Neurobiology Mikel Snow, PhD, Cell & Neurobiology Clive Taylor, MD, PhD, Pathology

Year II Faculty Teaching Awards

Rayudu Gopalakrishna, PhD, Cell & Neurobiology Enrique Ostrzega, MD, Medicine Seth Politano, DO, Medicine Mikel Snow, PhD, Cell & Neurobiology Ruth Wood, PhD, Cell & Neurobiology

HSC News

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Year III Faculty Teaching Awards

Jenny Jaque, MD, OB/GYN Kenji Inaba, MD, Surgery Enrique Ostrzega, MD, Medicine Seth Politano, DO, Medicine

Year IV Faculty Teaching Awards

Parul Bhatia, MD, Pediatrics Eric Hsieh, MD, Medicine Enrique Ostrzega, MD, Medicine

Non-Faculty Instructor Award Year I: Ryan Casserly, MD Year II: Sarah Norgaard, MD

Required Scholarly Project Outstanding Mentor Awards

Jon Detterich, MD, Pediatrics Kenji Inaba, MD, Surgery William Mack, MD, Neurological Surgery Nerses Sanossian, MD, Neurology

New Edmondson Faculty Center is lighter, brighter and open to all

By Hope Hamashige

In a word, the old Edmondson Faculty Center, with its chocolate brown wood paneling, oversized leather chairs and dim lighting, was dark.

And so, when it closed for renovations the first order of business was to brighten the place up starting with the decor. Gone are the panels of stained glass that kept sunlight at bay for decades and, in its place, is a wall of glass behind which runs a perimeter of bamboo. Gone, too, is the wood paneling which has been replaced with light taupe painted walls, adorned with colorful pieces of abstract art.

The food has also been lightened up to match

USC-led study finds genetic variants linked to prostate cancer susceptibility

By Leslie Ridgeway

An international study co-led by Keck School of Medicine scientists and researchers in the United Kingdom has revealed 23 new genetic susceptibility locations indicating risk for prostate cancer.

The data study, analyzing more than 87,000 individuals of European, African, Japanese and Latino ancestry, is the largest of its kind and is the first that combines multiple studies across different ethnic populations.

"The goal of this research is to identify regions of the genome that contribute susceptibility to prostate cancer that could be used for understanding a man's future risk of developing this disease," said principal investigator Christopher Haiman, ScD, professor of preventive medicine, Keck School of Medicine of USC. "This research also emphasizes the importance of common genetic variation in the etiology of prostate cancer, and the importance of large-scale international

genetics consortia."

According to the American Cancer Society, prostate cancer is the second most common cancer among American men, behind skin cancer. It is estimated that nearly 30,000 men will die of prostate cancer and more than 233,000 new cases will be diagnosed in 2014.

Past genome-wide association studies identified 77 variants associated with prostate cancer risk. The additional 23 variants found in the new study "give us another piece in the puzzle," Haiman said, and new targets for researchers looking into the causes of prostate cancer.

The combined studies that are part of this research have been conducted around the world over the past seven years. The research is chiefly funded by the NCI GAME-ON Consortium, formed to encourage interdisciplinary international collaborations.

The study, "A metaanalysis of 87,040



The new design of the Edmondson Faculty Center emphasizes a more open floorplan and brighter atmosphere.

the new room. Christina change with the seasons. Deocampo, assistant manager of the Edmondson Faculty Center, said the menu now features fresh, local ingredients that will

Probably the biggest change is that they have done away with the membership rule and made the faculty center open to all faculty and senior staff who want to have a relaxed meal at the only sit down restaurant on the Health Sciences Campus.

Doing away with the

membership was the only way to achieve another goal of the remodel, which was to create an elegant and welcome gathering spot for faculty, staff and even visitors to the Health Sciences Campus.

USC Hospitality also decided to expand the hours. While the Edmondson only served lunch in the past, it will now also be open for breakfast and for what they are calling lounge hours in the late afternoon. The bar, too, has a new menu including several locally-sourced craft beers and specially-crafted cocktails and mocktails with medically-themed names such as doctor's orders.

Just about the only thing that hasn't changed at the Edmondson Faculty Center is the name. Although almost everything about the Edmondson needed a change, a decision was made to keep the name as a nod to its past and its history on campus.

Reservations can be made on OpenTable.com or through the Edmondson's Facebook page https:// www.facebook.com/ TheEdmondson.

For more information, visit: http://www. theedmondson.com.

OPEN: Benefits enrollments forms are due by Nov. 14

Continued from Page 1

Arcadia, Beverly Hills and Pasadena.

The USC Network Medical Plan offers appointment scheduling assistance from the Trojan Family Navigator, at (323) TROJANS.

The USC Network Medical Plan is a PPO, allowing participants a choice of which physicians they want to see. Tier I of the plan includes nearly 600 USC physicians and more than 300 doctors associated with USC Verdugo Hills Hospital, serving the Foothill communities. The plan also includes access to PIH Health's hospitals in Whittier and Downey, urgent care centers in Whittier and Hacienda Heights and its more than 300 physicians. Tier II includes any doctor with an Anthem Blue Cross Prudent Buyer contract. This opens up a vast network of choices of locations where participants can receive care. "We want our faculty and staff to take advantage of the world-class services and care

Open Enrollment: What You Need to Know

The USC Network Medical Plan offers the best choice of esteemed physicians, convenient locations and quality health care from Keck Medicine of USC, including:

· Personal appointment scheduling assistance through the Trojan Family Navigator at (323) TROJANS

 More than 600 Keck School of Medicine of USC faculty physicians

 Access to Keck Medical Center of USC and USC Norris Comprehensive Cancer Center, as well as our physicians in more than 40 locations

· Access to USC Verdugo Hills Hospital in Glendale and its more than 300 physicians

 \cdot General ophthalmology care from the USC Eye Institute, ranked in the Top 10 nationally for 20 years by U.S. News & World Report (accepting VSP for employees and students)

· Access to PIH Health's hospitals in Whittier and Downey, urgent care centers in Whittier and Hacienda Heights and its more than 300 physicians

Learn more at benefits.usc.edu.

we offer right here at USC," said Tom Jackiewicz, MPH, senior vice president and CEO for USC Health which operates Keck Medicine of USC. "As we are expanding our locations, and whether you're looking for a primary physician or a specialist, we want you to be our first choice."

Signed benefits enrollment forms for changes or additions to medical, dental, vision, flexible spending accounts and disability insurance plans must be submitted by Friday,

individuals identifies 23 new susceptibility loci for prostate cancer," was published Sept. 14, 2014 in Nature Genetics.

Nov. 14.

Forms are available for download at tinyurl.com/ le6ntia.



Calendar of Events

Monday, Nov. 3

Noon. KSOM Research Seminar Series. "Regulation of Apoptotic Machinery to Overcome Melanoma Dual Resistance to Targeted Therapy and Immunotherapy by Chromatin Remodeling Drugs," Ali R. Jazirehi, UCLA. Aresty Auditorium. Info: Mary Jane Chua, (323) 442-7732, maryjane.chua@med.usc.edu

Tuesday, Nov. 4

Noon. Institute for Global Health Lecture. "Character: The Ultimate Survival Tool," Ethan Zohn, Grassroot Soccer. TCC 450. Info: globalhealth.usc.edu/ethanzohn

Noon. Psychiatry and the Behavioral Sciences Grand Rounds. "Hypnosis in Psychiatry: Using Hypnosis to Manage Symptoms as An Adjunct to Psychotherapy," Marc Schoen, UCLA. Herklotz Seminar Room, ZNI 112. Info: Gracie Vargas, (323) 442-4065, gvargas@usc.edu

1 - 4 p.m. CTSI Workshop. "Utilize Digital & Social Media Data for Your Research (Workshop 4: Digital Scholar Initiative)," Katja Reuter, USC. Harkness Auditorium. Info: Francis Ukpolo (323) 442-1996 francis.ukpolo@med.usc.edu, tinyurl.com/l2pmzzx

4 p.m. Dean's Distinguished Lecturer Series. General (Ret) David H. Petraeus, USC. Mayer Auditorium. Info and RSVP: www.usc.edu/esvp (code: Petraeus). Live webcast: keckmedia. usc.edu/mediasite/catalog/catalogs/ddls

5:30 p.m. Ophthalmology Grand Rounds. HC4 Conference Room, Third Floor. Info: Ty Christopher, (213) 409-5233, tyaishac@usc.edu

Wednesday, Nov. 5

8:30 a.m. Pulmonary, Critical Care and Sleep Medicine Lecture. "Pleural Effusion," Baljinder Sidhu, USC. IRD 734. Info: Elva Rubio, (323) 226-7923, elvarubi@usc.edu

Noon. The Saban Research Institute Seminar. "Structure and Function of the Helicobacter pylori CagA Oncoprotein," Masanori Hatakeyama, University of Tokyo. Saban Research Building, first floor auditorium, CHLA. Info: Laura Rabin, (323) 361-8715, Irabin@chla.usc.edu, chla.org/tecpad

Noon. Zilkha Neurogenetic Institute Seminar. "Rapid High Resolution Brain Mapping with Light Microscopy," "Raju Tomer, PhD", Stanford University. Herklotz Seminar Room, ZNI 112. Info: Julie Carl, (323) 442-3219, jcarl@usc.edu

Thursday, Nov. 6

10 a.m. Microbiology Seminar. "Role of the H. Pylori CagA Oncoprotein in Gastric Carcinogenesis," "Masanori Hatakeyama, University of Tokyo. NRT LG503, Harlyne Tower. Info: Aileen Calimlim, (323) 442-1710, calimlim@use. edu

Friday, Nov. 7

11 a.m. Jane Anne Nohl Division of Hematology and Center for the Study of Blood Diseases Grand Rounds. "Adult ALL-Chemotherapy Revisited and Novel Agents," Dan Douer, Memorial Sloan Kettering Cancer Center. LAC+USC Medical Center Inpatient Tower Conference Room D. Info: Carolyn Castellanos, (323) 865-3913, carolyn.castellanos@med.usc. edu



Atkins Foundation helps lead the fight against diabetes and obesity — Veronica Atkins, of the Robert and Veronica Atkins Foundation, visited the Health Sciences Campus on Sept. 4 to receive updates on the research of Michael Goran. Goran is a nationally known expert in childhood obesity and diabetes and the Dr. Robert C. and Veronica Atkins Endowed Chair in Childhood Obesity and Diabetes. Goran leads a multidisciplinary research team at the Atkins Lifestyle Intervention Laboratory at the Keck School of Medicine of USC. Above, from left are Keck School of Medicine researchers Frank Gilliland, Katie Page and Tanya Alderete, with Veronica Atkins and team leader Michael Goran.

HEART: Wireless implant for heart failure show promise

Continued from Page 1

clinical study that evaluated the CardioMEMS device showed that medication changes based upon changes in pressures measured by the device reduced future hospitalizations."

He added, "Now that we have access to pressure data in real time, this will allow us to respond and adjust treatment much faster; responding faster will allow us to reduce future hospitalizations for heart failure."

Delatorre said the implant offers him a chance to celebrate his 50th wedding anniversary in 2015 with his wife and two daughters, and to watch his five grandchildren grow up. Raised outside a small town in Zacatecas, Mexico, that had only two doctors, Delatorre says he is amazed that he is the recipient of this life-saving technology.

"My mother used home

year. Cardiovascular diseases kill more Americans than all forms of cancer combined, with heart disease accounting for one in six deaths in the U.S.

Heart failure occurs when the heart cannot pump enough blood throughout the body. Causes include a past heart attack, high blood pressure, abnormal heart valves and diabetes. Those suffering from heart failure experience shortness of breath, fatigue, nausea, increased heart rate and water retention leading to

USC Health Sciences Public Relations and Marketing 2011 N Soto Street - SST-2830 Los Angeles, CA 90032 swelling of the abdomen, legs and feet and an inability to sleep lying flat due to fluid build-up in the lungs. Some patients can recover heart function and lead normal lives, some require transplants or an implanted ventricular assist device and some have limited physical function and require frequent hospitalizations. Typically, heart failure affects people age 65 or older, although it can strike at any age and sometimes during pregnancy in younger women.

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Noon. USC Women in Management Workshop. "Speaking and Presenting with Authenticity," Peter Cardon, USC. IRD 305. Info: Ginger Mayerson, (323) 867-2200, mayerson@usc.edu, uscwim.wordpress.com. RSVP: uscwim.org/calendar.asp. WIM Members: free; non-WIM Members: \$10

Saturday, Nov. 8

7 a.m. – 5 p.m. Continuing Medical Education. "An Update on Esophageal Diseases." University Club of Pasadena, 175 N. Oakland Ave., Pasadena. Info: Teresa Ball, (323) 442-2555, teresa.ball@med.usc.edu, cmetracker.net/KECKUSC/ Catalog?eventid=32120

Notice: Calendar submissions must be received at least 10 days before an issue's publication date to be considered. Please note that timely submission does not guarantee an item will be printed. Entries must include day, date, time, title of talk, first and last name of speaker, affiliation of speaker, location and a phone number or email address for information.

Submit calendar items at tinyurl.com/calendar-hsc.

remedies," said Delatorre, who has suffered from heart failure for more than 10 years. "Now I have this new invention. It's like a gift to my body. It's like winning the lottery." Heart disease is the number one cause of death in the United States, according to the American Heart Association, taking more than 380,000 American lives each



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.