



Bill Youngblood

A satellite location for The Doctors of USC is now open in Beverly Hills. Located at 9033 Wilshire Blvd., the practice gives patients in surrounding communities convenient access to ophthalmology, urology and cancer care through the USC Doheny Eye Center, the USC Norris Westside Cancer Center and the USC Institute of Urology. "This is an exciting opportunity to share with our Westside communities the exceptional clinical care and innovative research happening at USC," said Carmen A. Puliafito, dean of the Keck School of Medicine of USC, whose leadership has been instrumental in the opening of The Doctors of USC Beverly Hills.

HTE@USC event raises interest in cross-disciplinary program

By Ryan Ball

Faculty and students from the Keck School of Medicine and the Viterbi School of Engineering were invited to mingle and get the latest news on the new Health, Technology and Engineering program, dubbed HTE@USC that will enroll the first of its students in the fall of 2011. Carmen A. Puliafito, dean of the Keck School of Medicine, delivered the opening remarks for the March 7 reception in the Edmondson Faculty Center. "We view USC, because of the excellence at the medical school and the excellence of the Viterbi School, as being the ideal locus to develop an academic program that will integrate both educational, research and clinical excellence," said Puliafito.

HTE@USC was initiated three years ago by Elizabeth Fini, vice dean for research advancement at the Keck School and director of the USC Institute for Genetic Medicine. The program's academic director is Terry Sanger, who has appointments at both the Keck and Viterbi schools. Sanger works closely with George Tolomiczenko, an assistant professor in the department of neurology at the Keck School, who serves as administrative director of HTE@USC.

Sanger began his presentation with a video of a young girl suffering from cerebral palsy. "We do this because of this girl," he said. "She's using a lot of technology. She's in a powered wheelchair with a filtered joystick controller, she apparently has a touch-screen communication device and she has an implanted deep-brain stimulator to help treat some of her dystonic movements. Obviously, the results are far from perfect, so we want to find ways to make this technology better."

Sanger and Tolomiczenko appealed to faculty and students to link with the program, whose overall mission is to develop rapid advances in health care through research and education combining medicine and engineering.

Student projects will connect clinical sites and HSC labs with UPC-based labs and mentors. "HTE students will See **HTE@USC**, page 2

Hospital Medicine program hits the ground running

By Tania Chatila

USC University Hospital is applying a rapidly growing field of medicine to its repertoire of patient care techniques.

Hospital administrators and the Keck School of Medicine's Department of Medicine recently launched a Hospital Medicine program that guarantees around-the-clock coverage by a USC faculty physician at USC University Hospital. The program aims to enhance inpatient care by dedicating a small group of physicians to focus solely on caring for patients in the hospital setting.

"In the past, our model for inpatient care has really relied on residents and our faculty physicians, many of whom have successful, private practices also competing for their attention," said David Goldstein, chief of the Division of Geriatric, Hospital, Palliative and General Internal Medicine. "With this new program, our Hospital Medicine physicians can focus all of their time and energy on providing our inpatients with the best possible care."

The core Hospital Medicine team is made up of four faculty physicians from the Division of Geriatric, Hospital, Palliative and General Internal Medicine. They are Vickie Wu, Carlo Medina, Mahmood Khaleedy and program director Michael Wang. Together, they provide the bulk of the 24/7 coverage outlined by the program. But since four physicians can't staff it all, the team receives night and weekend support from other Department of Medicine faculty physicians.

"Over the last 15 years,

Hospital Medicine has been a rapidly growing field of medicine," said Wang, who was recruited from the University of California Irvine Medical Center, to manage USC University Hospital's program. "It's different and unique in both the time and experience spent focusing on patients ill enough to be in the hospital. We also understand the complex hospital system and leverage that understanding toward the benefit of our patients."

In addition to caring for See **HOSPITAL**, page 2

'With this new program, our Hospital Medicine physicians can focus all of their time and energy on providing our inpatients with the best possible care.'

—David Goldstein, chief of the division of geriatric, hospital, palliative and general internal medicine



Tania Chatila

Patient Lee Bolden discusses her care with physicians Mahmood Khaleedy and Vickie Wu, faculty physicians who staff the Hospital Medicine program at USC University Hospital. This new program is meant to enhance inpatient care by dedicating a small group of physicians to focus solely on treating patients in the hospital setting.

CHLA celebrates 110 years of service, launches branding campaign

'Children's Hospital Los Angeles was the first children's hospital in LA, and shares a tremendous part of this city's history.'

—Richard Cordova, CEO of Children's Hospital Los Angeles

In celebration of its 110th anniversary, Children's Hospital Los Angeles is launching a re-branding initiative that includes a new look, new message and the return of the missing apostrophe in "Childrens," which was left out due to a faulty typewriter key in 1901.

The hospital also launched a city-wide ad campaign, including billboards, print, radio, bus wraps and other multimedia.

"Children's Hospital Los Angeles was the first children's hospital in LA and shares a tremendous part of this city's history," said Richard Cordova, CEO of Children's Hospital Los Angeles.

It is one of America's premier teaching hospitals, affiliated with the Keck School of Medicine since 1932.

"Our hospital has a long record of successful 'firsts' and innovation in the field of pediatric and adolescent care, but we have always let our great work speak for us," Cordova said.

"While we continue to celebrate the history that is the foundation of this great institution, we want to give Children's Hospital Los Angeles a much bigger presence in the community to make sure our message is heard: the best care for your child is right here in your backyard."

The landmark non-profit institution—the first children's hospital in Los Angeles and the only one in the Western United States ranked among the nation's top eight—is moving forward with a new logo featuring a symbolic butterfly to represent the incredible



transformations that take place every day within its walls.

The new logo also foreshadows the exciting changes happening throughout 2011 on the campus, located at Sunset Boulevard and Vermont, including the July opening of a new, state-of-the-art \$636 million hospital building.

Children's Hospital Los Angeles also launched a new tagline that drives to the heartbeat of its mission: "We Treat Kids Better." With top pediatric specialists—all faculty members of the Keck School of Medicine—in more than 100 subspecialties and related programs

Children's Hospital Los Angeles is recognized for its ability to treat the toughest and most unique cases, as well as its innovation in and improvement of existing treatment options through research.

But "treating" is more than just medicine; it's the approach. At Children's Hospital Los Angeles, caring for infants, children, teens and families is about seeing the world through their eyes to create an environment of confidence, compassion and hope.

In 1901, Children's Hospital Los Angeles began operation in a small house on Castellar Street—

located in what is now Chinatown—with the lone doctor making house calls on horseback and the "surgery suite" in what had served as the house's pantry. It admitted 14 patients in its first year.

Today, Children's Hospital Los Angeles is one of the nation's top-ranked children's hospitals, serving more than 10,000 inpatients, 300,000 outpatient visits and more than 65,000 patients in the Emergency Department every year.

It is also one of only eight children's hospitals in the nation—and the only on the West Coast—ranked in all 10 pediatric specialties in the 2010 *U.S. News & World Report* rankings and named to the magazine's national "Honor Roll" of children's hospitals.

Additionally, Children's Hospital Los Angeles is home to The Saban Research Institute, one of the largest and most productive pediatric research facilities in the United States.

HOSPITAL: New program aims to enhance inpatient care

Continued from page 1

patients admitted to the hospital, the Hospital Medicine team also sees consults around the clock in the hospital and the Evaluation and Treatment Clinic, performs preoperative medical risk assessments, participates in quality improvement committees, spearheads educational initiatives for residents and is on-call for the campus' Rapid Response Team, which provides urgent care at USC Norris Cancer Hospital, Healthcare Consultation Centers I and II and the Doheny

Eye Institute.

Since launching the program, hospital administrators and physicians agree the program has already made a significant impact. It has been especially helpful in acting as a bridge of communication between departments and staff, said Khaleedy.

"We're very pleased with the progress Dr. Wang and his team have made in such a short time," said Scott Evans, chief operating officer of USC University Hospital and USC Norris Cancer Hospital. "The Hospital Medicine program

represents important collaboration with our physicians to improve the experience and outcomes of patients staying in our hospital."

Wang credited the support received from other Department of Medicine physicians and the hospital to the program's early success: "We certainly have many hopes and desires for our Hospital Medicine Program. But we also recognize without the involvement of other faculty and without the hospital's support, none of this would be possible."

HTE@USC: Upcoming meeting to spur collaborations

Continued from page 1

be the newest subset of a growing mentorship web connecting people across schools. This is also consistent with the clinical translational efforts of the USC CTSL," said Tolomiczenko.

This year's symposium will focus on challenges and new collaborations in Neuroscience

Engineering. The symposium will be a series of roundtable discussions at the University Park Campus on March 25 from 8 a.m. to 2:30 p.m.

To attend, contact George Tolomiczenko at tolomicz@usc.edu or (323) 774-1442.

More information on HTE@USC can be found at <http://hte.usc.edu>.



USC nurse recruiters Briana Sosa and Cherie Phelps visit Our Lady of Guadalupe School in Los Angeles on Feb. 2 to talk to students about careers in health care.

Hospitals Human Resources staff reach out to future medical professionals

By Tania Chatila

The USC hospitals are recruiting for future medical jobs.

Personnel from USC University Hospital and USC Norris Cancer Hospital Human Resources visited Our Lady of Guadalupe School in Los Angeles on Feb. 2 to talk to students about careers in health care. Recruiters Briana Sosa and Cherie Phelps spoke to about 100 students altogether in the third, fourth, fifth, sixth and seventh grades during the school's Career Day.

They talked to the students about the two USC-owned hospitals, as well as careers in the medical field such as nursing, physical therapy, radiology and pharmacy. Sosa said the underlying message

of their presentations was to encourage students to stay in school and pursue higher education while demonstrating what it would be like to work in the health care arena.

"Many of the students were Trojan fans so they were excited about USC visiting their school. They were very responsive and interested in what we had to say," said Sosa. "They were really engaged and asked a lot of good questions."

Sosa said the visit is part of a larger Human Resources effort to do more community outreach, particularly at area schools. "We want to reach out to children and households to brand our hospitals for the purpose of attracting current and future talent," she said.

The Weekly

Next Issue: March 18

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

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CHLA researchers bioengineer a protein to fight leukemia

By **Ellin Kavanagh**

Scientists at the Children's Center for Cancer and Blood Diseases and The Saban Research Institute of Children's Hospital Los Angeles have announced a breakthrough discovery in understanding how the body fights leukemia.

They have identified a protein called CD19-ligand (CD19-L), located on the surface of certain white blood cells, that facilitates the recognition and destruction of leukemia cells by the immune system. This work represents the first report of a bioengineered version of CD19-L, a recombinant

human biotherapeutic agent, targeting CD19-positive leukemic stem cells.

B-lineage acute lymphoblastic leukemia (ALL) is the most common cancer occurring in children and adolescents. Despite having received intensive chemotherapy, some patients have recurring disease. For these individuals, the prospect of long-term survival is poor.

"We need new anti-leukemia therapies capable of killing chemotherapy-resistant leukemia cells in patients with relapsed ALL. These are the cells that are the most difficult to treat. The

challenge is to kill these cells while leaving healthy cells intact," said Fatih Uckun, first author on the paper that has been published in the *British Journal of Haematology*. Uckun is also a professor of Pediatrics at the Keck School of Medicine and a member of the developmental therapeutics program at the USC Norris Comprehensive Cancer Center.

Lymphocytes are a type of white blood cell involved in immune function and are categorized as either B-cells or T-cells. This newly discovered element, CD19-L, is expressed on the surface of T-lymphocytes and allows them to selectively bind to the CD19 receptor on the surface of B-lineage leukemia cells, and most importantly on leukemic stem cells responsible for the survival and expansion of the leukemia cell population. Once the CD19-L binds to leukemia cells, cell death occurs. Although CD19 is abundantly expressed on leukemia cells from B-lineage ALL patients, it is absent on red cells, T-cells, and normal bone marrow stem cells, making it specific, and

therefore, a good therapeutic target.

Uckun and colleagues have bioengineered and prepared a highly purified liquid formulation of the human CD19-L protein. This recombinant protein not only shows selective binding to leukemia cells but also causes their rapid destruction within 24 hours. Perhaps most importantly, CD19-L killed even those leukemia cells that were highly resistant to both standard chemotherapy drugs and radiation.

CD19-L is the first CD19-specific recombinant human protein with potent anti-leukemic activity against B-lineage ALL, the second most common form of acute leukemia in adults. The identification of CD19-L may lead to therapeutic innovation for childhood leukemia by allowing a selective destruction of leukemic stem cells. According to Uckun, the next step will be to carefully evaluate this new agent for clinical potential against leukemia and to confirm in preclinical studies that leukemic cell destruction can be achieved at non-toxic dose levels.

'We need new anti-leukemia therapies capable of killing chemotherapy-resistant leukemia cells.'

—Fatih Uckun, professor of Pediatrics at the Keck School of Medicine

'Walk for Keck' slated for April 13

The USC University Hospital Guild will host its fifth annual "Darlene Dafau Reid Walk the 5k for Keck" on April 13 to raise money for scholarships for Keck School of Medicine students and medical research.

The group invites students, staff, faculty and friends to participate in the event, which will run from 11 a.m. to 2 p.m. at Harry and Celesta Pappas Quad. Entry costs \$10 for students and \$20 for staff, faculty and friends. All participants will receive a t-shirt, snacks, water and lunch.

For more information or to register, e-mail Candy Duncan at cdadsc@aol.com or call (310) 545-2239. Online, registration is available at keck.usc.edu/Guild5k and donations may be made at keck.usc.edu/Guild5kDonate.

High school student aids the USC/LA County Haiti relief efforts

By **Ryan Ball**

While most guys his age are more likely to be found thumbing through a gamer magazine or the latest X-Men comic, Christopher Antaki was perusing the Summer 2010 issue of *Keck Medicine* magazine when he saw an opportunity to make a difference. The senior at Chaminade College Preparatory High School read an article titled "Help for Haiti," and knew he had to get involved.

"I was interested in helping out because, first of all, the earthquake and then they were hit with cholera and then the political unrest and it's just been non-stop," said Antaki. "Of course, there are problems in other countries, but that's the reason I decided to help



After reading an article on aid to Haiti in *Keck Medicine* magazine, high school student Christopher Antaki (left) contacted Keck School Dean Carmen A. Puliafito (right) to see how he could help, ultimately raising \$1,000 for people in that country.

there."

After reading the article, Antaki contacted Amy Puliafito, daughter of Keck School

Dean Carmen A. Puliafito, who helped him organize his fundraising efforts. Envelopes in hand, the teen then went

out to people in his community who he knew would welcome the opportunity to give.

Antaki was aware that his pediatrician, Peter Shulman, had visited the Republic of Burundi in east Africa to aid medical relief efforts there, and was confident that he and his medical group would be willing to support the work of the USC/LA County Haiti Medical Aid Team. They ended up giving \$500, which was matched by members of Antaki's family for a total of \$1,000 to date.

While he recognizes that his contribution is a drop in the bucket considering the amount of aid required to build a new Haiti, Antaki hopes that his example will

inspire others to make similar gestures of good will.

"If you ever feel touched by a story like I did in the magazine, it's not that hard to help," he encourages. "Just give it a little bit of time and effort and you can definitely do it."

Antaki, whose father did post-graduate work in infectious diseases at the Keck School, has applied to attend USC and hopes to find himself in the Global Health program so he can one day work as a doctor internationally and lend his services wherever they are most needed.

For more information on the USC/LA County Haiti Medical Aid Team's ongoing efforts, see their blog at www.uschaiti.com.

The Weekly NEWSMAKERS

A March 4 segment of KCET's "California's Gold" interviewed **Christi Heck**, director of the USC Comprehensive Epilepsy Program, in a story about epilepsy.

A March 6 article on NBC News San Francisco affiliate KNTV-TV interviewed **Jaimie Davis**, assistant professor of preventive medicine at the Keck School of Medicine of USC, on ways to get kids to eat vegetables, noting that she is affiliated with the USC Childhood Obesity Research Center.

A March 7 story in the *Los Angeles Times* quoted **Donna Spruijt-Metz**, assistant professor at the Institute for Health Promotion and Disease Prevention Research, about the health impact of excess abdominal fat.

A March 8 article on Science Channel's "Innovation Nation" featured the artificial retina developed at the USC Doheny Eye Institute by **Mark Humayun** of the Keck School of Medicine and the USC Viterbi School, which has allowed some blind patients to see again. Future implants that render images with 1,000 pixels instead of 60 pixels will get users closer to a high-definition experience, the story stated.

A March 10 story in the *San Francisco Business Times* covered work by **Paula Cannon**, associate professor of molecular microbiology & immunology, pediatrics, biochemistry & molecular biology at the Keck School of Medicine, and colleagues to create HIV-resistant cells, and quoted Cannon. Live Science and *The Philadelphia Inquirer* also covered the story.

Calendar of Events

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

Tuesday, Mar. 22

9 a.m. Neurology Grand Rounds. "Neurocysticercosis and Chronic Epilepsy: Cysts and Twist," David Millett, USC. ZNI 112. Info: (323) 442-7686

Noon. Psychiatry Grand Rounds. "Treating Sleep Disorders," Michael Wincor, USC. ZNI 112. Info: (323) 442-4065

Wednesday, Mar. 23

Noon. ZNI Seminar. "Light Detection in the Retina," King-Wai Yau, Johns Hopkins. ZNI 112. Info: (323) 442-2144

4 – 6 p.m. USC Ctr. for Excellence in Teaching. "Developing the Big Picture: How to Build Excellence & Reach New Audiences for Research in the Humanities & Social Sciences," Thomas Habinek, USC. UPC: CUB 329. Info: (213) 740-3959

Thursday, Mar. 24

Noon. Cellular Homeostasis Lecture. "Coverage of Genetic and Stem Cell Biology in Human Disease," Deepak Srivastava, UC San Francisco. MCH 156. Info: (323) 442-3121

Noon. ZNI Seminar. "Solid-state NMR Investigations on Prion Proteins and Protein-solvent Interactions," Ansgar Siemer, Columbia Univ. ZNI 112. Info: (323) 442-2144

4 p.m. "Oncogenomics to Target Myeloma in the Bone Marrow Microenvironment," Kenneth Anderson, Harvard. NRT LG 503/504. Info: (323) 865-3913

Friday, Mar. 25

8 a.m. "Update in Management of Multiple Myeloma," Kenneth Anderson, Harvard. IPT C2J104 Conference Rm. B. Info: (323) 865-3913

8 a.m. Pathology and Laboratory Medicine Grand Rounds. "Leadership Challenges in Residency," Joseph York, USC. NOR 7409. Info: (323) 442-1180

8:30 a.m. Surgical Grand Rounds. "Will Thyroid Cancer Treatment Ever Become Evidence Based?" James Recabaren, Governor, American College of Surgeons. DOH 100. Info: (323) 442-2506

8:30 a.m. HTE@USC Frontiers Symposium. "Neuroscience Engineering Challenges: From Basic Science and Applied Research, to Clinical Solutions," Dean Carmen Puliafito and Dean Yannis Yortsos, USC. UPC: Ronald Tutor Hall, Rm. 450. Info: (323) 774-1442

11 a.m. Physiology and Biophysics Seminar. "Human Red Blood Cells Produce and Release Nitric Oxide: Considerations for Vascular Control," Oguz Baskurt, Koc University, Istanbul, Turkey. NML West Conference Rm. Info: (323) 442-1268

11:30 a.m. Physical Sciences in Oncology Center Seminar. "The Physical Organization of Chromosomes and Cancer," John Marko, Northwestern Univ. CSC 240. Info: (323) 442-3849

Monday, Mar. 28

Noon. The Beyond Medicine Lecture Series. "Beyond the MD," Various speakers. HMR 100. Lunch will be provided. Info: (323) 442-1678

Tuesday, Mar. 29

Noon. The Beyond Medicine Lecture Series. "Beyond the Specialist," Various speakers. NML West Conference Room. Lunch will be provided. Info: (323) 442-1678

Wednesday, Mar. 30

Noon. The Beyond Medicine Lecture Series. "At the Juncture: The Diabetes Epidemic," Moderated by KSOM Dean Carmen A. Puliafito and will include various speakers. NRT Aresty Aud. Lunch will be provided. Info: (323) 442-1678

4–6 p.m. Center for Excellence in Research. "Developing and Submitting a DoD and DoE Basic Research Grant Application," James Murday, USC. NML West Conference Rm. Info: (213) 740-6709

Thursday, Mar. 31

Noon. USC Religious Life. "The Soul of Medicine," Norman Levan, USC. MCH 256. Info: (213) 740-6110

Noon. ZNI Seminar. "Late Endocytic Transport: Impact on Autophagy-lysosomal Function and Neurodegeneration," Qian Cai, NIH. ZNI 112. Info: (323) 442-2144

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 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.



Patient Lidia Fornas thanks Vaughn Starnes, chair of the Department of Surgery at the Keck School of Medicine of USC, for his part in returning her to an active lifestyle.

Clinical trial tests new heart valve treatment

By Leslie Ridgeway

USC University Hospital is one of 40 hospitals across the United States to participate in a clinical trial testing a new percutaneous treatment option for patients suffering from severe aortic valve stenosis.

A team led by Vaughn Starnes, distinguished professor and chair of the Keck School of Medicine Department of Surgery, and Ray Matthews, professor of cardiovascular medicine, recently performed the percutaneous procedure to replace the diseased aortic valve of Lidia Fornas, an 84-year-old patient.

In aortic valve stenosis, the heart's aortic valve interferes with blood flow from the aorta to the rest of the body. Untreated, aortic valve stenosis leads to serious heart problems.

"The ability to treat this serious condition in a percutaneous way could lead to fewer complications and the ability to offer valve replacement to patients at increased risk for open-heart surgery," said Matthews.

The procedure, also known as a Transcatheter Aortic Valve Implantation (TAVI) procedure, is being tested in the clinical trial. It is performed by inserting a catheter with a prosthetic valve into a tiny opening in an artery in the patient's thigh. The catheter is threaded carefully to the patient's heart, where the prosthetic valve is expanded, effectively replacing the diseased aortic valve.

Patients have the potential to leave the hospital within two or three days of this percutaneous procedure, as opposed to six to seven days following open-heart surgery.

The first patient to undergo the procedure, Lidia Fornas, was discharged from USC University Hospital three days later. Two months after the procedure, Fornas says she is back to activities she couldn't do for a year.

"I couldn't climb the steps to my bedroom," said Fornas, a Reseda resident. "I had to sleep sitting up because I couldn't breathe. Now, I can go up and down the stairs with no problem. I even go outside and do the gardening now."

Fornas, a grandmother of

six, modified her diet after the procedure, and does exercises recommended by her doctors. When asked what she wants to do now that she feels better, she said, simply, "Live."

"Being a wife, a mother and a grandmother makes me a complete person," she said. "I told my son-in-law, 'You're going to have a mother-in-law for a long time!'"

Patients with aortic valve stenosis can experience chest pain, faintness, shortness of breath and fatigue during increased activity, and heart palpitations.

As the heart is forced to work harder due to the valve narrowing, the patient may eventually experience heart failure.

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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.