TheWeekly

theweekly.usc.edu

PUBLISHED FOR THE USC HEALTH SCIENCES CAMPUS COMMUNITY

USC University of Southern California

Keck students, benefactors celebrate success at Scholarship Luncheon

By Ryan Ball

"While your contributions have made a substantial difference in our lives as students, what is greater is that you are also giving to all of the patients whom we will treat throughout our careers."

—Tavis Dickerson-Young, fourth-year student, Keck School of Medicine of USC, in praise of donors The daughter of undocumented immigrants, Maria Sandoval credits excellent mentoring for helping her become the first member of her family to graduate high school and college. Now in her third year at the Keck School of Medicine of USC, she's getting another boost in her quest to become a primary care physician and practice in her underserved community in the San Fernando Valley.

Sandoval is the recipient of this year's scholarship named for Edward Zapanta, MD, the late USC neurosurgeon and first Hispanic member of the USC board of trustees. She recently had to the opportunity to thank Norene Zapanta for continuing her husband's support of Hispanic medical students. The two shared a meal at the Keck School's annual Scholarship Luncheon, held on Oct. 2 on the Harry and Celesta Pappas Quad.

"I get to meet the person who believed in me and thought it was important to help others to become doctors and be successful," said Sandoval. "I'm very grateful to have the honor of accepting this scholarship."

"It's important for the students to know that we're here supporting them," said Zapanta. "And then I hope they learn to give back. I think that's the biggest thing."

In his opening remarks, Henri Ford, MD, MHA, vice dean for medical



Donor Norene Zapanta with Maria Sandoval, recipient of the scholarship named for Zapanta's late husband, Edward Zapanta, a USC neurosurgeon and the first Hispanic member of the USC Board of Trustees.

education at the Keck School, thanked the donors for enabling the school to maintain its competitive edge.

"Scholarships, as you know, are truly vital in continuing to attract the very top students," Ford said, "and also for Keck to continue to expand its influence locally, as well as globally, in the medical arena."

Ford noted that the generosity of donors has allowed the Keck School to increase its number of scholarships from 19 to 42 over the past two years. Keck School Dean Carmen A. Puliafito, MD, MBA, added that it isn't enough to attract students who are academically strong. "We're looking to have a diverse student body with medical students from underrepresented minorities in the United States," Puliafito said. "This is very important in the delivery of equalaccess health care."

See **SCHOLARSHIP**, page 2

Researchers at USC uncover new possibilities for sweat gland stem cells

By Marie Rippen

Sweat is important — without it, we would overheat and die. In a recent paper in the journal *Public Library of Science One (PLOS ONE)*, USC faculty member Krzysztof Kobielak, MD, PhD, and a team of researchers explored the ultimate origin of this sticky, stinky but vital substance — sweat gland stem cells.

Kobielak and his team used a system to



Open enrollment an opportunity to choose Keck Medicine physicians

Open enrollment for benefits-eligible faculty and staff of the University has begun, and personnel are encouraged to choose Keck Medicine of USC providers by signing up for the USC Network Medical Plan.

This plan offers choice

Hospital, an expansion convenient to staff living in the Foothill communities. Tier II includes any doctor with a Blue Cross Anthem contract, affording a vast network of choices for where participants can receive care.

make all of the sweat gland cells in a mouse easy to spot: labeling them with green fluorescent protein (GFP), which is visible under ultraviolet light.

Over time, the GFP became dimmer as it was diluted among dividing sweat gland cells. After four weeks, the only cells that remained fluorescent were the ones that did not divide or divided very slowly — a known property among stem cells of certain tissues, including the hair follicle and cornea. Therefore, these slow-dividing, fluorescent cells in the sweat gland's coiled lower region were likely to be stem cells.

Then, the first author of this paper, graduate student Yvonne Leung, tested whether these fluorescent cells could do what stem cells do best — differentiate into multiple cell types. To the researchers' surprise, these glowing cells generated not only sweat glands, but also hair follicles when placed in the skin of a mouse without GFP.

The researchers also determined that under

Staining of slow-cycling sweat gland cells (green) with the protein laminin (red) and the fluorescent stain DAPI (blue).

certain conditions, the sweat gland stem cells could heal skin wounds and regenerate all layers of the epidermis.

"That was a big surprise for us that those very quiescent sweat gland stem cells maintain multi-lineage plasticity — participating not only in their own regeneration, but also in the regeneration of hair follicles and skin after injury," said Kobielak, assistant professor of pathology at the Eli and Edythe Broad Center for Regenerative Medicine and Stem Cell Research at USC.

See SWEAT, page 3

of physicians, convenient locations and lower costs. 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, as well as 325 doctors associated with USC Verdugo Hills "We want our staff and faculty to keep in mind the world-class services we offer right here," said Tom Jackiewicz, MPH, senior vice president and CEO for USC Health. "Whether you're looking for a primary physician or a specialist, we should be your first choice." See ENROLLMENT, page 3

USC Network Medical Plan offers exceptional value

Monthly Premium	USC	Kaiser
Individual	\$1,000	\$1,500
Family	\$3,000	\$3,000
Co-pays		
PCP	\$1O	\$25
Specialist	\$20	\$50
Generic Rx:	\$1O	\$15

Drug reduces brain damage, hemorrhaging in rodents afflicted by stroke

By Alison Trinidad

An experimental drug called 3K3A-APC appears to reduce brain damage, eliminate brain hemorrhaging and improve motor skills in older stroke-afflicted mice and stroke-afflicted rats with comorbid conditions such as hypertension, according to a new study from Keck Medicine of USC.

The study, which appears online in the journal Stroke, provides additional evidence that 3K3A-APC may be used as a therapy for stroke in humans, either alone or in combination with the FDA-approved clot-busting drug therapy tPA (tissue plasminogen activator). Clinical trials to test the drug's efficacy in people experiencing acute ischemic stroke are expected to begin recruiting patients in the United States in 2014.

"Currently, tPA is the best treatment for stroke caused by a blocked artery, but it must be administered within three hours after stroke onset to be effective," said Berislav V. Zlokovic, MD, PhD, director of the Zilkha Neurogenetic Institute (ZNI) at the Keck School of Medicine of USC and the study's lead investigator. "Because of this limited window, only a small fraction of those who suffer a stroke reach the hospital in time to be considered for tPA. Our studies show that 3K3A-APC extends tPA's therapeutic window and counteracts tPA's tendency to induce bleeding in the brains of animals having a stroke."

Zlokovic is the scientific founder of ZZ Biotech, a Houston-based biotechnology company he co-founded with USC benefactor Selim Zilkha to develop biological treatments for stroke and other neurological ailments. ZZ Biotech's 3K3A-APC is a genetically engineered variant of the naturally occurring activated protein C (APC), which plays a role in the regulation of blood clotting and

inflammation. 3K3A-APC has been shown to have a protective effect on the lining of blood vessels in rodent brains, which appears to help prevent bleeding caused by tPA.

In collaboration with Cedars-Sinai Medical Center and The Scripps Research Institute, Zlokovic and his team gave tPA — alone and in combination with 3K3A-APC — to mature female mice and male hypertensive rats four hours after stroke. They also gave 3K3A-APC in regular intervals up to seven days after stroke. They measured the amount of brain damage, bleeding and motor ability of the rodents up to four weeks after stroke.

The researchers found that, under those conditions, tPA therapy alone caused bleeding in the brain and did not reduce brain damage or improve motor ability when compared to the control. The combination of tPA and 3K3A-APC, however, reduced brain damage by more than half, eliminated tPA-induced bleeding and significantly improved motor ability.

"Scientists all around the globe are studying potential stroke therapies, but very few have the robust preclinical data package that 3K3A-APC has," said Kent Pryor, PhD, MBA, ZZ Biotech's chief operating officer. "The results from Dr. Zlokovic's studies have been very promising."

Zlokovic's team previously reported similar results in young, healthy male rodents. A Phase 1 trial testing the safety of 3K3A-APC in healthy human volunteers, led by study co-author Patrick D. Lyden, MD, of Cedars-Sinai, concluded in February.

"We now have opened an investigational new drug application at the FDA to conduct a Phase 2 clinical trial of 3K3A-APC in patients experiencing acute ischemic stroke," said Joe Romano, CEO and president of ZZ Biotech. "We are excited to see 3K3A-APC move from healthy volunteers to real

patients suffering from this terrible disease."

USC co-authors include Yaoming Wang, MD, PhD, senior research associate at ZNI, and Zhen Zhao, PhD, physiology and biophysics research associate. The research was supported by ZZ Biotech and grants from the National Institutes of Health (HL63290, NS075930, HL52246).



Berislav V. Zlokovic, MD, PhD, director of the Zilkha Neurogenetic Institute, and his team recently discovered that an experimental drug may reduce brain damage and eliminate brain hemorrhaging in mice and rats that have had strokes.

The Weekly ETCETERA

Breast cancer survivor and USC Norris Comprehensive Cancer Center supporter Ghecemy Lopez recently authored a consumer story on the Department of Defense Congressionally Directed Medical Research Programs website. "Ghecemy Lopez- Breast Cancer Survivor, Bilingual Patient Advocate, Cancer Research Supporter" features her volunteer activity at USC Norris and with the Adolescent and Young Adult Program at USC.

Zul Surani, manager of community outreach and partnerships and Jennifer Diamond Cancer Resource Library at the USC Norris Comprehensive Cancer Center, was recently appointed to the executive committee of California Dialogue on Cancer, the state's comprehensive cancer control program. Surani will provide a local perspective on community-based cancer prevention.

Tarek Salaway has been appointed Chief Operating Officer of Keck Hospital of USC and USC Norris Cancer Hospital. He will help ensure service quality, efficiency, fiscal responsibility and service excellence throughout his areas of service, and will continue responsibility for the departments he currently oversees.

SCHOLARSHIP: Education costs "insurmountable" without help

Continued from Page 1

Fourth-year Keck student Tavis Dickerson-Young was one of the scholars invited to share his story and discuss the impact scholarships have had on his education. Brought up by a single mother with limited financial resources, he managed to work and put himself through college. However, the high cost of medical education would have been an insurmountable obstacle without help.

"It's because of your scholarship donations that I am able to pursue my dream of becoming a physician," said Dickerson-Young. "While your contributions have made a substantial difference in our lives as students, what is greater is that you are also giving to all of the patients whom we will treat throughout our careers."

TheWeekly



ISSUE: NOV.

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 Creative Services: Tom DeSanto

Editor: Amy E. Hamaker

Contributors: Ryan Ball, Eva Blaauw, Tania Chatila, Elise Herrera-Green, Carol Matthieu, Jon Nalick, Sara Reeve, Leslie Ridgeway, Marie Rippen, Alison Trinidad and Suzanne Wu

Vice President, Public Relations and Marketing: Brenda Maceo

Phone: (323) 442-2830 Fax: (323) 442-2832 Email: hscwkly@usc.edu Web: theweekly.usc.edu



Part of the Keck School of Medicine of USC

Did you know?

The USC Center for Molecular Pathways and Drug Discovery opened in 2010. Led by Michael Kahn, PhD, Provost Professor of Medicine and Pharmacy, and Heinz-Josef Lenz, MD, professor of medicine and preventive medicine at the Keck School, the center's programs aim to treat cancer and other diseases by discovering and modulating cellular communication pathways.

Most cancer research focuses on one target at a time. Cancer cells, with their voracious survival instincts, find ways to bypass single targets that have been shut down. By focusing on networks of targets, the center tries to control hubs where disease cell pathways intersect, and then correct the cells' communication maps.

Gene variant raises colorectal cancer risk from eating processed meat

By Suzanne Wu

A common genetic variant that affects one in every three people significantly increases the risk of colorectal cancer from consuming red meat and processed meat, according to a study presented at the annual American Society of Human Genetics 2013 meeting.

In addition, the study — the first to identify the interactions of genes and diet on a genome-wide scale — reveals another specific genetic variation that appears to modify whether eating more vegetables, fruits and fiber actually lowers your colorectal cancer risk.

"Our study is the first to understand whether some individuals are at higher or lower risk based on their genomic profile. This information can help us better understand the biology and maybe lead to targeted prevention strategies in the future," said lead author Jane Figueiredo, PhD, assistant professor of preventive medicine at the Keck School of Medicine of USC.

"But we are not saying that if you don't have the genetic variant that you should eat all the red meat you'd like," Figueiredo added. "People with the genetic variant allele have an even higher increased risk of colorectal cancer if they consume high levels of processed meat, but the baseline risk associated with meat is already pretty bad."

The researchers searched the more than 2.7 million genetic sequences for interactions with consumption of red and processed meat. The study looked at 9,287 patients with colorectal cancer and a control group of 9,117 individuals without cancer.

The risk of colorectal cancer associ-

ated with processed meat was significantly higher among people with the genetic variant rs4143094. This variant is located on the same chromosome 10 region that includes GATA3, a transcription factor gene previously linked to several forms of cancer. The transcription factor encoded by this gene normally plays a role in the immune system, but carries this genetic variant in about 36 percent of the population.

The researchers speculate that the digestion of processed meat may promote an immunological or inflammatory response that may trigger tumor development. The GATA3 transcription factor normally would help suppress the immunological or inflammatory response. However, if the GATA3 gene region contains a genetic variant, it may encode a dysregulated transcription factor that impacts its ability to suppress the response.

But other genetic variants may be beneficial: On chromosome 8, another statistically significant diet-gene interaction was found in variant rs1269486. For people with this variant, eating your fruits and vegetables may be even better for you when it comes to colorectal cancer risk, the research shows.

"Colorectal cancer is a disease that is strongly influenced by certain types of diets," Figueiredo said. "We're showing the biological underpinnings of these correlations, and understand whether genetic variation may make some people more or less susceptible to certain carcinogens in food, which may have future important implications for prevention and population health."

Major funders include the National Cancer Institute of the National Institutes of Health.

The Weekly NEWSMAKERS

An Oct. 28 broadcast on HLNtv's *Jane Velez-Mitchell* featured an interview with **Natalie Strand**, MD, assistant professor of clinical anesthesiology at the Keck School of Medicine of USC, about prescription pain drugs. "What bothers me is the way that the prescription drug abuse situation is going on in this country," Strand said. "With great power comes great responsibility. I don't think the pill in itself is the problem."

An Oct. 28 article in *Rolling Stone* quoted Johanna Olson, MD, assistant professor of clinical pediatrics at the Keck School, about the difficulties facing transgender youth. "One kid in my practice tried to cut off their penis with a pair of scissors at five," said Olson, who is the director of the country's largest clinic for gender-nonconforming kids, the Center for Transyouth Health and Development at Children's Hospital Los Angeles. "It happens more often than you might think."

An Oct. 28 column in the *Pasadena Star-News* noted that **Ed Avol**, MS, professor of clinical medicine at the Keck School, would participate in a forum on global warming in Pasadena.

An Oct. 26 report by *Asia News International* featured a study by **Berislav V. Zlokovic**, MD, PhD, director of the Zilkha Neurogenetic Institute (ZNI) at the Keck School, and colleagues suggesting that an experimental drug could reduce brain damage, eliminate brain hemmoraging and improve motor skills in stroke victims. "Currently, tPA is the best treatment for stroke caused by a blocked artery, but it must be administered within three hours after stroke onset to be effective," Zlokovic said. The research also was covered by *Science Daily* and *el Science News*.

Keck Hospital Guild celebrates at fall benefit

The Sports Museum of Los Angeles was the setting for the Keck Hospital of USC Guild's Oct. 13 fall benefit, "Celebrate an Afternoon Among the Superstars." Thanks to the generosity of the private museum's owner and collector Gary Cypress, guests toured more than 30 galleries devoted to sports memorabilia spanning the late 19th century to the present. During the program, Evans updated the group on the most recent developments at the hospital, and USC star Anthony Davis shared his famous "Notre Dame killer" game. Pie and Burger of Pasadena provided "ball park tapas"- small burgers and other treats.

USC football great Shane Foley MHA emceed the event, leading a spirited Keck live auction. Auction items included a box at the Staples Center donated by Keck Hospital of USC, courtesy of Scott Evans, PharmD, MHA, CEO of Keck Hospital of USC and USC Norris Cancer Hospital; a tour of the McKay Center with J.K. McKay donated by USC Athletics and Kandi Wopschall; and press box passes, game tickets and Coliseum Drive parking for the Oct. 26 game against the



The Keck Hospital of USC Guild's fundraiser event "Celebrate an Afternoon Among the Superstars" raised funds for the hospital and for Keck School of Medicine of USC scholarships. Pictured here (left to right): guild member Janie Fain; Farrell Foley; emcee Shane Foley; guild President Thelma Orr; Scott Evans, PharmD, MHA, chief executive officer of USC Norris Cancer Hospital and Keck Hospital of USC; and guild member Kathy Lingle.

University of Utah donated by Kandi and Ed Wopschall.

Proceeds from the event will help fund hospital equipment and nursing education at Keck Hospital of USC, and scholarships at the Keck School of Medicine of USC. The event was cochaired by Janie Fain and Kathy Lingle, under the leadership of guild President Thelma Orr.

ENROLLMENT: Benefits changes due by Nov. 15

SWEAT: Exciting possibilities for future stem cell treatments

Continued from Page 1

This offers exciting possibilities for developing future stem cell-based treatments for skin and sweat gland-related conditions, such as hyperhidrosis or hypohidrosis (excessive or insufficient sweating). It could also lay the foundation for creating fully functional skin — containing both sweat glands and hair follicles — for burn victims.

Additional co-authors on the study included: Eve Kandyba, PhD; Yi-Bu Chen, PhD; and Seth Ruffin, PhD, all from the Eli and Edythe Broad Center for Regenerative Medicine and Stem Cell Research at USC.

The research study was supported by the National Institute of Arthritis and Musculoskeletal and Skin Diseases of the National Institutes of Health (grant numbers R03-AR061028 and R01-AR061552).

Continued from Page 1

Keck Medicine of USC has grown and added several new locations close to where staff live and work. Physicians practice at University Park Campus, and in offices in Downtown Los Angeles, Pasadena, Beverly Hills and La Cañada, as well as at Keck Medical Center. Many Keck Medicine physicians also have clinics throughout the community, such as obstetricians/gynecologists and ophthalmologists. As of January 2014, the USC Network Medical Plan will include Presbyterian Intercommunity Hospital (PIH) and Bright Health

Physicians in Tier I. Located in Whittier, PIH has a full-service hospital with emergency, obstetrics and pediatrics. Bright Health has more than 300 physicians with more than 150 primary care providers (almost 40 pediatricians) in 17 locations. It also offers urgent care facilities in Whittier and La Mirada

Members of the California Nurses Association wishing to access Keck Medicine of USC physicians and services should select MyChoice PPO 200 or MyChoice PPO 800 when signing up for benefits. Members of the National Union of Healthcare Workers (NUHW) should select MyChoice PPO 400 or MyChoice PPO 800.

This year, all changes or additions to medical, dental, vision, flexible spending accounts and disability insurance plans must be done on paper. Signed forms are submitted to Benefits no later than 5 p.m. on Friday, Nov. 15. Forms are available for download at https:// employees.usc.edu/2014benefits-open-enrollmentnews/.

For benefit enrollment assistance, contact the HR Service Center at (213) 821-8100 or via email at uschr@ usc.edu.

Calendar of Events

Tuesday, Nov. 12

Noon. Eli and Edythe Broad Center for Regenerative Medicine and Stem Cell Research at USC. "Epithelial Apoptosis: Death by Extrusion," Jody Rosenblatt, University of Utah. Broad CIRM Center Seminar Room. Info: (323) 442-8084

Noon – 1 p.m. Cancer Center Grand Rounds. "Regulation of the DNA Damage Response by an Inducible Long Noncoding RNA," Adam Schmidtt. Aresty Auditorium.

4 - 5 p.m. Dean's Distinguished Lecture Series. "The End of Overeating," David A. Kessler, U.S. Food and Drug Administration. Mayer Auditorium. Info: ajrobles@use.edu, register at www.use.edu/esvp (code: Kessler)

4 - 5 p.m. Women's Cancers Program Monthly Research Seminar. "The iCanCare Study and the Cancer Screening Study: Two Studies Addressing Different Stages of the Breast Cancer Care Continuum," Ann S. Hamilton, USC. Norris Topping Tower 7409.

Wednesday, Nov. 13

8:30 a.m. Department of Medicine. "Basic Lecture: Acid-Base/ ABG," Ami Oren, USC. IRD 732-734. Info: (323) 226-7923

Thursday, Nov. 14

Noon. Southern California Clinical and Translational Science Institute. "How to Apply for a Pre- and Post-Doctoral Research & Career Development Award," Cecilia Patino-Sutton, SC CTSI. Info: ecde@sc-ctsi.org

Noon - 1 p.m. Department of Medicine. "Biomarkers of Acetaminophen Toxicity," Laura James, University of Arkansas for Medical Sciences. Hastings Auditorium. Info: (323) 442-1283

5:15 p.m. – 6:30 p.m. Department of Anesthesiology Grand Rounds. "Quality in Anesthesiology – Do We Know It When We See It?" Richard P. Dutton, Anesthesia Quality Institute. Aresty Auditorium. Info: (323) 409-6856

6 p.m. Orthopaedic Surgery Grand Rounds. "Tibia Fracture: How, When, What and Why of Plating of Tibia Fractures," Raymond R. White, Tufts University. Reception at 5:30 p.m. Mayer Auditorium. RSVP: sylvia.suarez@med.usc.edu

Friday, Nov. 15

8:30 a.m. Department of Medicine. "Basic Lecture: Interesting Radiology Cases," A. Wilcox, USC. IRD 732-734. Info: (323) 226-7923

8:30 – 9:30 a.m. Surgical Grand Rounds. 15th Annual Leonard and Marie Louise Rosoff Lecture: "Metastatic Colorectal Cancer: Optimal Outcomes for Hepatic Metastases and Peritoneal Surface," Perry Shen, Wake Forest Baptist Health. DOH Building, 1st Floor Auditorium. Info: (323) 442-9064

Noon – 1 p.m. Center for Applied Molecular Medicine Monthly Seminar Series. "Time as the Fourth Dimension of Cancer Complexity," Peter Kuhn, Scripps Research Institute. Harkness Auditorium. Info: kgerber@use.edu

Sunday, Nov. 17

2 - 6 p.m. USC Institute for Genetic Medicine Art Gallery. "Bridge to the Soul: The Art of Healing" exhibition reception, various artists. USC IGM Art Gallery, 2250 Alcazar St., 2nd floor. Info: www.usc.edu/igm

Halloween on the Health Sciences Campus!

Halloween celebrations for kids of all ages took place on the Health Sciences Campus last week, both for spooky fun and to raise awareness for health research initiatives.

(Top Right) THIS TOUR IS ALWAYS A TREAT As part

of their annual Halloween Harvest Parade, children from the USC Child Care Center visited Keck Medicine of USC faculty and staff at the fountain outside of Keck Hospital of USC and at the lobby of the USC Norris Cancer Hospital, collecting sweets and smiles before stopping at Pappas Quad to show off their costumes. Pictured here, Adelaide Doty (left) and Prisha Patel go trick-or-treating on the Health Sciences Campus on Oct. 31.

(Bottom Right) CARVING

OUT PUBLICITY Movember, an official global charity, raises awareness and funds to make an everlasting impact on men's health, particularly in prostate and testicular cancer initiatives. This includes grant money awarded to the USC Catherine and Joseph Aresty Department of Urology at the Keck School of Medicine of USC to conduct critical research to end prostate and testicular cancer. The Movember team from Keck Medicine of USC needs you to help raise funds during November by growing a mo' (moustache) or supporting those who can. To learn more, visit moteam.co/menof-keck-medicine.





DeCanto

Non-Profit Organization U.S. POSTAGE PAID University of Southern California

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

Monday, Nov. 18

Noon – 1 p.m. KSOM Research Seminar Series. "Cracking the 'Histone Code' – New Lessons Learned from UHRF1," Brian Strahl, University of North Carolina, Chapel Hill. Aresty Auditorium. Info: (323) 442-1476, ResAdv@keck.usc.edu

Tuesday, Nov. 19

Noon – 1 p.m. Cancer Center Grand Rounds. "Mechanistic Dissection and Therapeutic Targeting of mTORregulated Translation in Cancer," Andrew Hsieh, USC. Aresty Auditorium.

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 hscwkly@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: (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.