/eekly



theweekly.usc.edu

PUBLISHED FOR THE USC HEALTH SCIENCES CAMPUS COMMUNITY

VOLUME 19 • NUMBER 9

Good Neighbors Campaign gets big boost from HSC

By Josh Grossberg

Donations from staff at the Keck Medical Center of USC—and a matching donation from the medical center itself—helped the USC Good Neighbors Campaign pass its 2012-2013 fundraising goal.

In total, \$1.62 million was raised for the campaign, which supports nonprofit organizations affiliated with the USC Neighborhood Outreach and the United Way. The goal was \$1.6 million. Workers at USC clinics, Keck Hospital of USC and the USC Norris Cancer Hospital ponied up \$79,000, with the medical center matching that amount.

In all, 5,565 donors participated, representing 32 percent of the university's faculty and staff, said Carolina Castillo, executive director of development for USC Civic Engagement.

The university does not separate the amount raised at the Health Sciences campus and the University Park campus, but hospital efforts were key to the

success, including setting up information tables around the hospitals Castillo said.

"The hospitals do a great job of reaching out to their employees on a personal level. Tabling is one way they create visibility," Castillo said.

For the 2013 campaign, HSC will be the site of a series of kickoff events at different locations around campus, Castillo said.

University Neighborhood Outreach gives grants to programs that serve the residents surrounding both the Health Sciences and University Park campuses. Money raised benefits health, fitness, music, economic development, job creation, early childhood education, summer camp, college access, theater and the arts.

Since it started in 1994, the Good Neighbors Campaign has raised more than \$16 million.

To learn more about the campaign or to make a donation, visit http:// communities.usc.edu/gnc.



Clockwise from above: Keck School of Medicine student Meena Zareh (right) shows off her letter announcing her match in internal medicine at USC as classmate Kelly Rue cheers her on; Mike Salisbury displays the letter showing he matched at Vanderbuilt University Medical Center in emergency medicine; Jessica Mason accepts a congratulatory hug after she matched in emergency medicine at Case Western/Metrohealth Medical





Keck students 'match' into residencies

By Josh Grossberg

Just as thousands of medical students across the country were doing at the exact same moment, Veronica Ramirez peeled back the envelope in her hand and learned what her fate would be for the next several years.

This is Match Day, the annual event when medical students simultaneously receive instructions on where to report for their residencies.

At precisely 9 a.m.—and not a minute sooner-students from the Keck School of Medicine of USC who had gathered in the Harry and Celesta Pappas Quad were handed their letters from the National Resident Matching Program, a nonprofit corporation that matches students with residency programs.

Shrieks and screams echoed across the quad as students learned if they were selected to work in the places they had hoped.

Ramirez got her second choice, and she smiled broadly when she discovered she would be staying in Los Angeles, close to her family in San Diego.

The 27 year old who is pursuing a career in primary care will be training at Los Angeles County+USC Medical Center.

"Looks like I'm staying here," she said, beaming. "It's going to be great. It's an achievement I'm happy about. I'm going to be a strong primary care physician no matter where I go.'

And she'll have plenty of company as a resident.

Overall, 16,008 U.S. seniors participated in this year's match, 520 fewer than last year.

Associate Dean for Student Affairs Donna Elliott said the matches at the Keck School were outstanding this year, with 157 total students participating, including those who were matched in early rounds for the military, urology and ophthalmology.

This year, 103 students will stay in California for all or part of their training, with 46 of those going with Ramirez to LAC+USC

See MATCH, page 4

No shaggy dog story

USC Norris patient, lost pooch make a perfect pair

By Josh Grossberg

He was a dog in need of a home.

She is an animal lover in search of a companion.

And so, it seems, they were destined to meet, this scraggly, underfed mutt and a patient at the USC Norris Comprehensive Cancer Center and Hospital.

It was raining hard that February morning when Ronna Harris saw a dog running through traffic outside the hospital. She and fellow social workers Vilekha Mohan and Jinsy Rogers managed to get hold of it.

"He was really filthy," Harris said. "He had no collar. I made one out of my scarf."



Jeanette Applegate rescued this dog after a chance meeting outside USC Norris Hospital.

They were thinking they were going to take the pooch to an animal shelter, but just then, USC Norris Hospital patient Jeanette Applegate was walking out of the center.

"I thought, 'God, that poor dog looks terrible," Applegate recalled. "But my daughter looked at me. I looked at her. She said, 'You've been wanting a dog."

What she wanted was a poodle. And this dog clearly had some poodle in him. Even so, Applegate, who recently had her second kidney

removed, was not sold on the idea.

"I told my daughter I can't take the dog. I have appointments," Applegate said. "But she got the car back from the valet, put the dog in the backseat of her brand-new Beemer and drove it home."

See DOG, page 2

U.S. News and World Report highlights key HSC programs

By Leslie Ridgeway

The Keck School of Medicine of USC improved its ranking by three places in the 2014 U.S. News & World Report's Annual Guide to Best Graduate Schools.

The Keck School now ranks 31st in research in a four-way tie with Brown University, Oregon Health and Science University, and University of Rochester.

The new rankings will appear in the May 2013 issue of *U.S. News and World Report* and are available online at http://tinyurl.com/c5hrbr.

"I attribute this important move up in the rankings to the strength of our faculty, staff and students, who make the Keck School one of the best medical schools in the country," said Keck School Dean Carmen A. Puliafito. "This national recognition is a testament to our commitment to excellence in research and education."

In fall 2012, 126 accredited medical schools and 23 schools of osteopathic medicine were surveyed for the ranking. Medical schools are ranked based on student selectivity admission statistics (MCAT, GPA and acceptance rate), faculty to student ratio and total enrollment numbers, as well as National Institutes of Health research grants.

The Keck School is at the forefront of medical education with a recently redesigned and integrated hands-on curriculum.

The school is among the first medical schools to adopt Introduction to Clinical Medicine courses for first-year students to give them real-world experience in patient care from the start of medical school. And, the school is home to Health, Technology and Education at USC (HTE@USC), an innovative educational program developed in 2010 along with the USC Viterbi School of Engineering to facilitate cross-disciplinary education for medical and engineering students to work jointly on solutions to health care problems.

USC's Division of Biokinesiology and Physical Therapy and the Division of Occupational Science and Occupational Therapy were ranked number one in the last ranking for those disciplines, which took place in 2012. Both divisions are housed within the Herman Ostrow School of Dentistry at USC.

The USC School of Pharmacy was ranked 10th in a four-way tie in 2012 with the University of Arizona, University of Utah and University of Washington.

The health rankings in physical therapy, occupational therapy and pharmacy are based solely on the results of peer assessment surveys sent to deans, other administrators, and/or faculty at accredited degree programs or schools in each discipline.

Keck School professor appointed to California Medical Board

By Amy E. Hamaker

California Governor Jerry Brown has appointed Felix Yip, a clinical professor at the Keck School of Medicine of USC and chair of surgery at Garfield Medical Center in Monterey Park, Calif., as one of the 15 members of the Medical Board of California.

Yip, who served his internship at Los Angeles County+USC Medical Center in 1980, believes that his experience at USC has given him a leg up in his participation on the board. "I have a lot of experience in community practice, and I typically

see a lot of Medi-Cal and Medicare patients," he said. "My connection with USC has given me a big academic boost, and I'm excited to start working with them."

Yip's first task as a board member will be to assess his own participation in how the board operates in its mission, which is to protect health care consumers through the proper licensing and regulation of physicians and surgeons and certain allied health care professions, to enforce the Medical Practice Act, and to promote access to

quality medical care through the board's licensing and regulatory functions. According to Yip, the medical board also prompts wellness in physicians and offers an outreach program to encourage new and foreign medical school graduates to apply for a California medical license.

"I need to learn what they do, as they oversee nearly 110,000 licensed physicians," he explained. "I hope to help them continue to streamline the system, deal with complaints from the public more efficiently, and to be fair to the physicians as well."

COLLABORATIVE PLANNING—

Richard Zaldivar, left, president and founder of The Wall las Memorias, expresses support for community engagement in planning efforts of both USC and the Los Angeles County+USC Medical Center. At the March 13 meeting of the Keck School of Medicine Dean's Community Leadership Council, Laurie Stone, executive director, USC Land Use and Planning, and Ken Lee, right, principal, Lee, Burkhart, Liu Inc., presented information about the Health Sciences campus and LAC+USC plans, respectively. Also attending was Sina Yerushalmi, associate principal of Lee, Burkhart, Liu Inc., the planning and architectural firm that has contracted with Los Angeles County to lead planning and outreach efforts.



Participants sought for clinical trial on cancer prevention

Faculty and staff of USC are strongly encouraged to participate in the Cancer Prevention Study-3, a clinical trial run by the American Cancer Society.

Participants between the ages of 30 and 65 will be asked to complete a survey that will help identify the environmental, genetic and lifestyle factors that increase or lower cancer risk.

Sgn up by March 26 at www.cps3usc.org.

Enrollment will occur on April 11, 2013.

The Weekly

Next Issue: March 29

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.

Executive Director of Communications: Ina Fried

Assistant Director of Publications: Sara Reeve

Editor: Jon Nalick

Contributors: Ryan Ball, Eva Blaauw, Imelda Valenzuela Fowler, Josh Grossberg, Amy E. Hamaker, Carol Matthieu, Carole Omoumi, Leslie Ridgeway, and Alison Trinidad

Senior Vice President, University Relations: Tom Sayles **Vice President, Public Relations and Marketing:** Brenda Maceo

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

DOG: Patient adopts furry companion

Continued from page 1

The dog turned out to be barely a year old. He had worms, eye damage and was scarred in places by some unknown caustic substance.

Everybody thought he was brown, but after three baths, he turned out to be white.

Harris is not surprised that the dog went home with Applegate.

"She takes care of stray people," Harris said. "She's adopted two foster sons. She's worked in the prison system. She's just one of those kinds of people."

For Applegate, bringing the dog home was the right choice.

"It was a spiritual intervention," she said. "He is

the most adorable, loving, great watchdog. He's great."

Other bonds were formed as well—Applegate and Harris became friends. And as a urology social worker, Harris was able to provide expert consultation, as well as emotional support when Applegate was preparing for her surgery.

Even though she has had both kidneys removed, Applegate does not regret her decision to get a pet.

"Health issues or not, dogs are great companions."

And then there was the issue of a name.

She tried a few—Sparky, Curly—before she found one that seemed more appropriate.

She named him "Norris."

Dean of Keck School of Medicine of USC leads delegation to Russia

By Ina Fried

Keck School of Medicine of USC Dean Carmen A. Puliafito led a delegation of faculty members to Russia, where he signed a memorandum of understanding for an exchange program with a leading Russian medical school.

In addition, faculty members spoke at the XVII Congress of the Union of Pediatricians of Russia and participated in a roundtable on cancer and women's health chaired by Svetlana V. Medvedeva, wife of Russian Prime Minister Dmitry Medvedev.

The exchange program with the I.M. Sechenov First Moscow State Medical University calls for collaboration in medical education and medical science.

"We are delighted to build on USC's long-term relationships in Russia," said Puliafito. "We look forward to sending two of our medical students to enrich their medical education with international experience during a twomonth clinical rotation in Moscow. In turn, we will host a scientist-clinician in our areas of research and clinical expertise at the Keck School."

Petr V. Glybochko, rector of the Russian medical school, said in a letter, "I firmly believe that our mutually beneficial cooperation will provide a significant contribution to the development of international educational programs in medicine and resolving the most acute issues in health care."

The discussion on cancer and women's health was a follow-up to a 2010 meeting at which Medvedeva proposed to establish an association of nonprofit women's health centers, beginning with one in St. Petersburg to focus on cancer prevention and early diagnosis in women.

"We remain very interested in helping Svetlana Medvedeva to create awareness around women's health and to develop programs in breast cancer detection and treatment for Russian women," said Stephen Sener, chief of breast and soft tissue surgery at the Keck School.

Additional Keck School participants in both the 2010 and 2013 cancer discussions were: Christy Russell, associate professor of clinical medicine and



A delegation from the Keck School of Medicine of USC to Russia discussed cancer and women's health with Svetlana V. Medvedeva, wife of Russian Prime Minister Dmitry Medvedev. From left are: Christy Russell, Vladimir Zelman, Carmen A. Puliafito, Medvedeva, Natasha Pastushenko and Stephen Sener.

director of the USC
Norris Breast Center, and
Vladimir Zelman, professor
and clinical co-chairman
of the Department of
Anesthesiology, professor of
neurology and neurological
surgery, and a member of
the Russian Academy of
Sciences. Zelman initiated
and organized the trips.

The international program at the XVII Congress of the Union of Pediatricians of Russia focused on "Pediatric Education: Past, Present, Future."

"This was a tremendous opportunity to meet with the Minister of Health of the

Russian Federation Veronika Skvortsova and other thought leaders in Russia on addressing an impressive timeline of improving child health outcomes," said D. Brent Polk, vice dean for child health, professor and chairman of the Department of Pediatrics, and physicianin-chief and vice president for academic affairs at Children's Hospital Los Angeles (CHLA). "The Congress has recognized the need to train more pediatricians and invited her participation in a think tank on innovation in pediatric education. The Congress also included us in the program celebrating the 250th anniversary of the founding of the first

children's hospital in Russia

by Catherine the Great."

Among the speakers and panelists from the Keck School were: Puliafito; Polk; Lawrence M. Opas, professor of clinical pediatrics, vice chair of pediatrics and associate dean for graduate medical education; and Kathleen Nelson, clinical professor of pediatrics at the Keck School and CHLA.

The delegation also met with the senior vice president for research and innovation and the vice president for research development, Institute of Science and Technology; and the governor of the Far Eastern region of Russia to discuss cooperation with the Far Eastern Federal University to develop a medical center.

Nobel laureate examines puzzles of brain disease

By Josh Grossberg

The population is getting older and neural degenerative diseases are on the rise, but there are glimmers of hope for the aging, according to a Nobel Prize winner who spoke to staff and students at the Keck School of Medicine of USC on March 14.

Stanley Prusiner, recipient of the 1997 Nobel Prize in Physiology or Medicine, addressed his discovery and years of research into the prion, a self-replicating protein that can cause a variety of neural degenerative diseases, including Parkinson's, Huntington's and Alzheimer's diseases.

Prusiner, who has written hundreds of articles and 12 books on the subject, said that in the early days of his research in the 1970s, there was little information to be had about what was causing all these degenerative diseases.

The statistics are daunting: By the time someone reaches 85, they have a one-in-two chance of developing Alzheimer's disease.

"It's a terrible loss," he said. "A terrible loss. Age is an incredible risk factor in Alzheimer's."

But after discovering anomalies in the brain of a 60-year-old woman who died from Creutzfeldt–Jakob disease in the 1970s, he began his lifelong quest to understand and treat degenerative conditions.

"Nobody knew what to do about it," he said. "Nobody knew how to attack the problem. I didn't know if it was a protein, a carbohydrate or a piece of DNA. But this brash young man—me—began to work on it."

Years later, much has been learned. But, according to Prusiner, many puzzles remain. Why, for example, if some diseases are



Nobel Prize Laureate Stanley Prusiner chats with attendees of his March 14 lecture at the Health Sciences campus.

inherited, are they triggered later in life?

"Disease does not just occur," Prusiner said. "Something must happen."

What causes Alzheimer's to progress?" he continued. "It's a constant march. More and more of the brain is lost. Prions provide an explanation. It's the self-propagation of prions that's responsible for this progression."

In recent years, drug studies have been conducted on mice that have been inoculated with the illnesses. The signs have been encouraging.

"One drug doubles the life of animals inoculated with a kind of prion," he said.

Prusiner is turning his attention to humans and is ready to start investigating drug protocols.

"If we could prolong their lives 100 mouse days, that's probably 3,000 human days. But maybe it's only 1,000 human days. Maybe it's 500 human days. That's a year and a half. That would be significant."

The work remains challenging, but Prusiner remains upbeat.

"I'm very optimistic," he said after the talk. "I'm a scientist. All scientists are optimists."

The Weekly NEWSMAKERS

The March 2013 edition of *What Doctors Know* magazine featured interviews with **Wendy Gilmore**, associate professor of neurology and cell and neurobiology at the Keck School of Medicine, and **Lilyana Amezcua**, assistant professor of neurology, both of the USC Multiple Sclerosis Comprehensive Care Center and Research Group. The story focused on the various aspects of multiple sclerosis, from diagnosis to treatment to outlook. "People diagnosed with MS may experience a lot of emotions during the process, which is natural," Amezcua said. "At USC, we specifically try to reach out and identify early on whether patients are having a difficult time coping with MS."

A March 19 broadcast on KPCC-FM featured interviews with Keck School of Medicine students **Veronica Ramirez** and **Andrew Gausepohl** about Match Day. "I'm very excited—I'm very happy to be continuing as a Trojan here," said Ramirez, who matched into an internal medicine residency at USC. KPCC-FM ran a second story reporting that internal medicine and emergency medicine were the most popular residencies this year, with 28 fourth-year students matched to each.

A March 18 broadcast on ABC News Los Angeles af-filiate KABC-TV featured interviews with the Keck School of Medicine's **Stephen Liu**, assistant professor of medicine, and Gabriel Zada, assistant professor of neurological surgery, who were part of a multidisciplinary team that treated a patient with a rare form of cancer at the Keck Medical Center of USC. The story included footage of **Bozena Wrobel**, assistant professor of clinical otolaryngology at the Keck School; **Lai "Melody" Ouyoung**, speech therapy manager at Keck Hospital of USC; and USC speech therapist **Tzu-Han "Monica" Mu** interacting with the patient.

Calendar of Events

Tuesday, Mar. 26

Noon. Global Health Lecture. "From Policy to Implementation – Challenges in the Field," Joel Lamstein, John Snow, Inc. UPC: TCG 450. Info: (323) 865-0419

4 p.m.-5 p.m. Diabetes & Obesity Research Institute Seminar. "Adipose Tissue Cells in Pathology and Approaches to their Targeting," Mikhail Kolonin, University of Texas Health Science Center at Houston. CSC 250. Info: (323) 442-2500

Thursday, Mar. 28

Noon. Cellular Homeostasis Lecture. "Nitric Oxide (Synthesis) Regulation of Mitochondrial Functions," Cecilia Giulivi, UC Davis. MCH 156. Info: (323) 442-3121

4 p.m. Diabetes & Obesity Research Institute Seminar. "mHealth Interventions for Diet and Activity: Are They Ready for Prime Time?" Bonnie Spring, Northwestern University. CSC 250. Info: (323) 442-2500

6:30 p.m.-8:00p.m. Health Matters: USC physicians discuss health topics you care about. "Lung Cancer 2013: Making Progress at USC," various speakers. University Club of Pasadena, 175 North Oakland Ave., Pasadena, CA 91101. For more info and to RSVP, log on to usc.edu/esvp (code: HEALTHMATTERS3) or call 323-442-2805.

Friday, Mar. 29

8 a.m. Pathology and Laboratory Medicine Grand Rounds. "Clinical Microbiology in the Molecular Era: A New Age in Rapid Diagnostics," Rosemary She, USC. NOR 7409. Info: (323) 442-1180

8:30 a.m. Surgical Grand Rounds. "Tissue Engineering Applications in Surgery," Bo Han, USC. DOH 100. Info: (323) 442-9064

8:30 a.m. Medicine Grand Rounds. "Mechanisms Regulating Lung Injury Repair and Lung Tumor-Propagating Cells," Carla Kim, Harvard. IRD 732-734. Info: (323) 226-7923

Monday, Apr. 1

Noon. Medicine Grand Rounds. "Myocardiac Viability," Vamshi Gade, USC. IPT Conference Room B. Info: (323) 226-7556

Tuesday, Apr. 2

7:30 a.m.-9 a.m. USC Institute for Integrative Health Breakfast Reception and Speaker Seminar Series. "Pre-Clinical and Clinical Studies of Botanical Agents for Breast Cancer," Debu Tripathy, USC. Breakfast reception at 7:30 a.m., speaker at 8 a.m. NRT LG 503/504. Info: (323) 442-2638

Wednesday, Apr. 3

Noon. ZNI Seminar. "Information Flow in the Auditory Cortex: Anatomical and Physiological Correlates," Troy Hacket, Vanderbilt University. ZNI 112. Info: (323) 442-2144

Thursday, Apr. 4

Noon. Cellular Homeostasis Lecture Series. "Epigenetic and Transcriptional Mechanisms that Guide Stem Cells into the T Lymphocyte Developmental Pathway," Ellen Rothenberg, CalTech. MCH 156. Info: (323) 442-3121

Noon. Global Health Week Short Film Screening. "Women: The Face of AIDS." BCC 101. Info: (323) 865-0419

Friday, Apr. 5

11:30 a.m.-1 p.m. Southern California Environmental Health Sciences Center Seminar. "Best Practices for Designing Built Environments to Promote and Protect Health," Jean Armbruster, LA County DPH. SSB 116. Info: (323) 442-1096

Saturday, Apr. 6

8 a.m.-1 p.m. 6th Annual Fight for Air Climb. The Keck Medical Center of USC is a proud sponsor of this event to raise awareness for the 37 million Americans who suffer from lung disease. Aon Center, Los Angeles. Register online at http://www.lung.org/pledge-events/ca/los-angeles-climb-fy13/.

Tuesday, Apr. 9

Noon. Psychiatry Grand Rounds. "Human Factors in Surgery and Team Handoffs," Ken Cathpole, Cedars Sinai. ZNI 112. Info: (323) 442-4065

Notice: Deadline for calendar submission is 4 p.m. Monday to be considered for that week's issue—although three weeks' advance notice of events is recommended. Please note that timely submission does not guarantee an item will be printed. Send calendar items to *The Weekly*, KAM 400 or fax to (323) 442-2832, or email to eblaauw@usc.edu. Entries must include day, date, time, title of talk, first and last name of speaker, affiliation of speaker, location and a phone number for information.

MATCH: Students matched to residencies in suspenseful ceremony

Continued from page 1

for some, or all, of their training.

The rest of the students will relocate in 20 states and the District of Columbia. For the fourth year in a row, New York will receive the highest number of Keck School students.

Emergency medicine and internal medicine were the most popular programs, with 28 students each. Obstetrics and gynecology, orthopedic surgery, and radiology followed, with 11 students each.

Andrew Gausepohl, Keck School co-president of the student body, was thrilled that he was picked to go to his No. 1 choice, Harbor-UCLA Medical Center.

"I fell in love with the program," said Gausepohl, whose residency will be in emergency medicine. "It's a new program, and I feel I can make my mark there."

Kelsey McClure will head to St. Joseph's Hospital and Medical Center in Phoenix with a residency in general surgery.

"I'm pretty excited," she said, one arm wrapped around her fiancé and the other holding a dog's leash. "That's where we want to go. It'll be hot, but I really like the program. I'm from Oregon, but the sunny side."

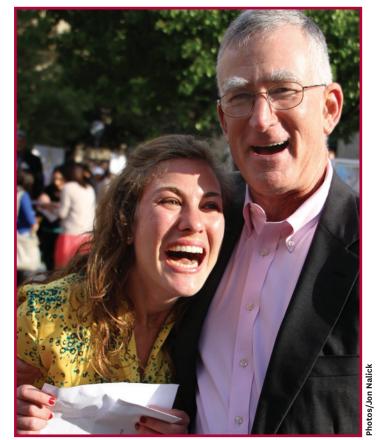
But there was sadness along with the celebration. Many students knew that their time together was coming to an end.

"It's bittersweet leaving USC and my friends," said 27-year-old Scott Honowitz, who opted for a residency in radiology. "But other than the day I got into USC, this is the most exciting."

For the first time this year, students were asked to stick pins in a map where they would be heading. By the end of the ceremony, pins were spread out across the country.

Before they received their news, Keck School Dean Carmen A. Puliafito raised a glass of champagne to toast the students.

"I have some advice,"
Puliafito said, "The two
months between now and
graduation should be the
greatest of your life. You're
freed from some of the
tremendous pressures and
responsibilities of academic
achievement. You can
work with your friends
and enjoy a tremendous





From top: Keck School of Medicine student Julia Pratt and her father Frank Pratt react to learning that she matched in pediatrics at Children's Hospital Los Angeles; medical student Cindy Luu examines a map showing where she and her peers had matched.

sense of accomplishment. We celebrate you all here today."

Ramirez is not worried about hard work and wants to hit the ground running. Saying she did not sleep much the previous night,

she's happy the nervousness of Match Day is behind her.

"This is the most nervewracking day," she said. "It's the culmination of the last four years and the end result of that effort and a lot of sleepless nights."

USC Health Sciences Public Relations and Marketing 1975 Zonal Ave. KAM 400 Los Angeles, CA 90033 Non-Profit Organization U.S. POSTAGE PAID University of Southern California



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.