The Weekly



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Historic Flyover—Left and below,
Health Sciences campus employees
gather atop the Biggy Parking
Structure on Sept. 21 to view the final
flight of the space shuttle Endeavor.
Dozens of students, staff and faculty
members flocked to the tops of
the campus' tallest buildings to
cheer the midday event. Endeavour
will travel through city streets on a
12-mile journey from Los Angeles
International Airport to the California
Science Center, arriving in the
evening on Oct. 13.



USC kicks off Good Neighbors Campaign

By Hope Hamashige

USC's staff, faculty and friends are about to have the opportunity to renew their pledge to help organizations that aim to improve the community by promoting better health and educational opportunities in the areas surrounding both the Health Sciences and University Park campuses.

The 2012 USC Good Neighbors Campaign kicks off on Oct. 1 and runs through the end of the month.

There will be a kickoff on the Health Sciences campus on Sept. 28 in the Pappas Quad at which students and employees will have the opportunity to meet community partners funded by campaign contributions and to sign up to pledge their support.

Organizers are hoping at least 50 percent of USC's faculty and staff will

participate to help achieve this year's goal of raising \$1.6 million. Last year, nearly 6,000 people affiliated with USC contributed, raising over \$1.5 million.

Of the programs that received funds last year, a dozen were health care-related initiatives. Nearly \$300,000 was given to groups related to health sciences that included the USC Neighborhood Mobile Dental Clinic, the Engineering for Health Academy, Science for Life, HSC Health and Science Expo, USC Physical Therapy Fit Families Program, the USC Med-COR program, and the HSC Community Health and Wellness Fair.

As in years past, donations can be made through payroll deduction or by check and are tax deductible. This year it is also possible to make a recurring donation using a credit card.

Donations to the campaign can be made online, but those interested in participating will be able to sign up at the kickoff.

"The faculty, staff and students of the Health Sciences campus have been strong supporters of the Good Neighbors campaign in years past and for good reason," said Dean Carmen A. Puliafito of the Keck School of Medicine of USC.

"Many of the programs supported by Good Neighbors have goals that are in line with our own because they promote better health and science and math education in our community. I expect our faculty and staff will again be major supporters of this worthwhile project this year," he added.

School of Pharmacy Dean R. Pete Vanderveen, an avid supporter of the Good Neighbors Campaign, has seen the tremendous impact that the program has had in our community.

"USC is a leader in so many fields, and the Good Neighbor Campaign gives each of us an opportunity to share our expertise with our neighbors," said Vanderveen. "At our school alone, the GNC has helped us produce fotonovelas on diabetes and depression, educate children and parents about poison prevention, and

Keck School of Medicine to launch online public health program

By Hope Hamashige

The Keck School of Medicine of USC will begin educating the next generation of public health leaders online next semester, in the spring of 2013, in an effort to help meet growing demand for professionals in this area.

"There's an acute shortage of public health workers both nationally and globally," explained Shubha Kumar, director of the Keck School's online Master of Public Health program and assistant professor of clinical preventive medicine. "USC started this program to respond to that need."

The new platform will allow the Keck School to admit, and ultimately graduate, more students. It also opens the field of prospective students to working professionals, many of whom are clinicians, who want the opportunity to pursue further education while keeping their jobs, as well as to people who live out of state or even overseas.

The Association of Schools of Public Health describes the shortfall of the public health workforce facing the United States as a "crisis" as the population ages, as changes in the delivery of health care take place at a rapid pace and as globalization all pose new challenges. According to the ASPH, there may be as many as 250,000 unfilled public health jobs by 2020 as demand for this expertise is on the rise.

"The online M.P.H. program is yet another reflection of USC's commitment to transforming education, providing greater access to, and accountability in, higher education in a rapidly changing world," said Kumar.

The online classes, said Kumar, are going to integrate the best practices in distance education, including a mix of video lectures and narrated slide presentations from Keck School faculty members. In addition, there will be interactive discussion boards, case

See **ONLINE**, page 2

Keck Medical Center expands pharmacy, saving time and money

By Hope Hamashige

A project to retrofit a maze of pipes tucked underneath ceiling tiles is a messy and time-consuming prospect. But for the pharmacy at Keck Medical Center of USC, it was also an opportunity to make some much-needed changes.

Every pill, vial, tube and intravenous bag had to be taken out of the pharmacy for the four months that crews worked on the seismic retrofitting and other construction. Since the space was empty, the pharmacy administrators decided to upgrade and expand the IV room, add some additional space to the stacks containing the oral and liquid medications, and add a larger and more secure safe for storing all controlled substances.

While few hospital staff and no patients will ever see the changes, pharmacy administrators said there will be notable benefits.

Specifically, they will be able to dispense medications for patients more efficiently, which will drive down costs.

The single biggest change was made to the IV room, which previously had only one area, called a laminar flow hood, for mixing the drugs that go into IV bags. That space was expanded to include a second hood that can handle hazardous drugs, such as chemotherapy drugs. Previously, there had been only one hood in the hospital, in a satellite pharmacy on the ninth floor, that was properly vented for pharmacy staff to handle potentially toxic drugs.

The hoods in the main pharmacy are now behind two walls or partitions and so are more contained than they had been in the past. This helps to keep the environment stable with proper particulate count and temperature and humidity control and allows them to ensure the



Melanie Joe (left), director of pharmacy services, and Dorothy Wong, assistant director of pharmacy services, in the newly remodeled pharmacy in Keck Hospital of USC.

solutions are safer for patients and drugs will have a longer shelf life.

In the past, explained Dorothy Wong, assistant director of the Department of Pharmacy, solutions created in the old hoods had to be used within 24 hours

See **PHARMACY**, page 4

See **GNC**, page 2

\$3.5 million gift establishes USC/UKRO Kidney Research Center

'Partnering

together, I think we

will create the best

research center in

nephrology on the

West Coast.'

—Vito Campese,

at the Keck School

professor of medicine

By Amy E. Hamaker

The Keck School of Medicine of USC and the University Kidney Research Organization (UKRO), a Los Angeles-based nonprofit group that supports medical research concerning the causes, improved treatments for, and prevention of kidney disease, announced the establishment of the USC/UKRO Kidney Research Center at the Keck School.

The new center was created with the help of a recent gift pledging \$3.5 million from UKRO. At the announcement, made on Sept. 19, entertainment lawyer and UKRO founder Ken Kleinberg said he was inspired to raise awareness and funds for kidney research after suffering from a kidney ailment in 1999, leading to a kidney transplant in 2007. "I was told at the time, 'We've known about [the kidney disease] for years, but we don't know what causes it," he said. "That was in 1999; today, in 2012, we still don't know what causes it. The lesson of all this, of course, is the only way we can conquer kidney disease is through research."

Singer, songwriter and performer Natalie Cole, who attended USC briefly as a student, remembered her time as a kidney transplant patient in 2009 as difficult. "I really didn't know what to expect," she said. "Symptoms

don't always show; I found out there are so many people with kidney disease who don't even know they have it, and that scares me. This moment [of creating the Kidney Research Center] is one that's most overdue, but welcome."

Vito Campese, professor of medicine at the Keck School and chair of UKRO's Medical Scientific Advisory Board, and Edward Crandall, chair of the Department of Medicine at the Keck School, described the importance of prioritizing kidney research through the Kidney Research Center. "With determination and

perseverence, Ken Kleinberg and UKRO have really driven this initiative and helped USC make it happen," said Crandall.

The center will be operated as part of the Keck School of Medicine's division of nephrology in the Department of Medicine. "This inauguration is certainly a landmark in the future of the division of nephrology and kidney research at the Keck School of Medicine, and we're very happy to work with UKRO," said Campese, chief of the division. "Partnering together, I think we will create the best

research center in nephrology on the West Coast."

Keck School of Medicine Dean Carmen A. Puliafito said, "Millions of people in America suffer from chronic kidney disease, but with the establishment of this center, those patients now have an extra champion in the fight. We are proud to be the home of this new center, and are grateful for the leadership of Dr. Campese, Dr. Edward Crandall, the chair of our Department of Medicine, and the support from UKRO that helped make establishing the center possible."



Pictured above, at the announcement are (from left to right) Keck School Dean Carmen A. Puliafito; Kenneth Kleinberg, founder of UKRO; singer/songwriter Natalie Cole; and Vito M. Campese, professor of medicine and chair of the Keck School's division of nephrology, and chair of UKRO's Medical Scientific Advisory Board.

ONLINE: Online M.P.H. students to graduate with same degree as on-campus students

Continued from Page 1

studies, simulations, and blogs, and students will have the chance to join live video conferences with professors and other students.

"While it's a different experience than the traditional classroom setting, we still want to ensure a high level of student-faculty and studentstudent interaction," said Kumar.

The program is fully accredited, and online students will graduate with the same degree as students who attend courses on the USC Health Sciences campus. Online students will take a set of core

courses and choose one of three tracks of study: biostatistics and epidemiology, health education and promotion, or global health leadership. There are also plans for a health policy track to be offered in the future.

Public health encompasses a wide range of jobs, said

Kumar. Some graduates enter the policy field, others conduct epidemiological research at academic hospitals, and some work in hospital administration. Some work in community clinics in some of the world's most dire settings, while others will help hospitals and government agencies prepare for emergencies such as outbreaks or bio-terror attacks at home.

Given the growing concern most students have over the cost of their education, one publication recently did an analysis of the cost of a degree and weighed it against future job prospects and average salaries. After combing through several professional degrees, Kiplinger declared M.P.H. degrees among the top graduate degrees worth pursuing.

According to its 2011 report, Kiplinger noted that public heaIth administrators earn, on average, salaries higher than \$90,000. That salary, combined with the huge and growing demand for this field, means the degree will more than pay for itself.

Still, the field is more than lucrative and relatively secure in an unsteady economy.

"There are many things you can do with a public health degree," said Kumar, "and many of the jobs are not only interesting, but also very rewarding given the impacts they can have on the lives of individuals and communities."

The Weekly

Next Issue: Oct. 5

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GNC: Campaign has rased \$14 million to date

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give high school students an opportunity to work as scientists on research projects through STAR. I'd say this is an extraordinary program."

Begun in 1994, the USC Good Neighbors Campaign encourages USC faculty and staff to contribute a portion of their paychecks to support programs that help strengthen local communities through USC Neighborhood Outreach and United Way. Students, alumni and friends can also participate.

To date, the campaign has raised more than \$14 million to support more than 500 community partnership programs.

Bridging the Gaps minority students program set to expand in 2013

By Amy E. Hamaker

An ongoing program to attract top minority students to the Keck School of Medicine of USC recently completed its second successful year and, with the help of sponsors, is hoping to double participation next year.

The program recently received notice that the American Diabetes Association will fund for next year's program two students who are engaged in diabetes and/or obesity-related research. These students will also have the opportunity to present their research findings at the association's annual scientific session in Chicago in June 2013.

The Bridging the Gaps: Bench to Bedside Summer Research Program allows outstanding minority students to gain exposure to the Keck School's research and clinical programs and encourages them to pursue their graduate studies at the Keck School.

Last year, 12 undergraduate students participated in the inaugural program. This year, 13 students worked with 14 Keck School faculty mentors for eight weeks in their laboratories to produce abstracts and formal research posters.

This year's students hailed from Columbia University, Rutgers University, Cornell University, Harvard University, Oberlin College, Oral Roberts University, Spelman College, Morehouse College, Missouri State University, University of Hawaii, Manoa, and Florida State University.

During the eight-week program, students heard lectures in physiology, biophysics and

other topics including cultural competency in medicine and minority health issues. They were invited to special lectures from visiting faculty, clinicians and researchers. Students also had small group and individual meetings with deans, faculty and staff in admissions offices to learn about resource specialists, financial aid, global medicine and various specialties.

Once research was completed, the program culminated in several poster sessions, where students explained their

research and conclusions to Keck School faculty, students and researchers.

Visiting students were also given a peek into what life as a Keck School student might be like. Graduate students and postdocs in mentor laboratories acted as informal mentors. The program students were able to meet with a medical student panel and individual medical students for questions or one-on-one meetings.

"We were excited to have a modest increase in the number of students participating in the program this summer," said Joyce Richey, assistant dean of medical education at the Keck School and the program's director. "Over the next few years, our goal is to ultimately increase the class size to 24 students.

"Ideally, we hope that more organizations and individuals will help financially support our important initiative to enrich the candidate pool of underrepresented minorities pursuing careers as physician scientists and biomedical scientists," she added.

Body Computing 6.0 conference explores advances in mobile health care

By Leslie Ridgeway

The annual USC Body Computing Conference, which brings together digital health leaders to discuss the myriad of issues in wireless health, will be on Friday, Oct. 5 at the USC Town and Gown ballroom. A networking dinner—featuring a discussion of the collaborative work between the USC Body Computing Center and the USC School of Cinematic Arts—will take place on the evening of Oct. 4.

For the sixth year, Leslie Saxon, chief, division of cardiovascular medicine at the Keck School of Medicine, and founder of the USC Center for Body Computing, will lead the discussion about wireless health and how it is changing the delivery of health care. Body Computing Conference attendees will see a variety of new technology, such as apps and commercial tablet technology for programming heart devices, which could fundamentally change the device industry.

The USC Center for Body Computing, which runs the conference, studies, incubates, and creates wireless health products with other USC Schools and corporate partners. It creates health games, social networking sites, devices, and other digital healthcare solutions.

Conference topics include mobile health and sports, a question and answer session with a senior level Food and Drug Administration representative, and how the entertainment industry influences mobile health.

In addition to Saxon, David Agus, professor of medicine and engineering at the Keck School of Medicine and USC Viterbi, will give opening remarks.

Other USC leadership and faculty participating in the conference include Thomas E. Jackiewicz, senior vice president and chief executive officer for USC Health, and Joshua Lee, chief information officer, USC Health.

Tickets to the conference are \$500. To register for the 2012 Body Computing 6.0, go to http://www.uscbodycomputing.org.

T-shirt fundraiser to aid breast cancer fight

To raise breast cancer awareness, USC Norris Cancer Hospital is offering a "We Fight to Play On" T-shirt for purchase through the end of October.

Purchase of the Trojan T-shirt will promote breast cancer awareness while supporting breast cancer research at USC Norris Cancer Hospital. Visit any USC Bookstore or hospital gift shop—or buy one at uscbookstore.com/breast-cancer.

As part of a new tradition to celebrate breast cancer awareness at a USC Trojan football game, Trojans are invited to visit the Keck Medical Center of USC booth at the Coliseum, located near the Olympic Torch, before the game against Colorado on Oct. 20. Visitors can show their support for USC Norris Cancer Hospital researchers, physicians, clinical staff and patients, who fight against breast cancer every day.

At the game, Norris physicians, staff members and breast cancer patients will make a special halftime appearance on the field, where they will be recognized as leaders in the fight against breast cancer.



Keck Medical Center of USC Pasadena welcomes alums—Nearly 40 members of the USC Alumni Club of San Gabriel Valley gathered at the Keck Medical Center of USC Pasadena on Aug. 18 for an open house and tour of the examination and procedure rooms, light refreshments and to mingle with the doctors who practice there. The 22,000-square-foot office houses more than 40 Keck Medical Center of USC faculty physicians and occupies the entire fourth floor of the Huntington Pavilion. Pictured here (from left to right) are Brian Prestwich, clinical assistant professor of family medicine; Indira Rollins, director of Keck Medical Center of USC Pasadena; and Lizelle Brandt, president of the USC Alumni Club of San Gabriel Valley.

The Weekly NEWSMAKERS

A Sept. 24 article in *Becker's Hospital Review* profiles **Scott Evans**, CEO of Keck Hospital of USC and USC Norris Cancer Hospital.

A Sept. 24 public forum hosted by KPCC-FM's Crawford Family Forum featured **Brian Prestwich**, clinical assistant professor of family medicine at the Keck School, as a panelist in a discussion about workforce demand and health care.

A Sept. 24 report by the *Daily Mail* (U.K.) featured research by **Rob McConnell**, professor of preventive medicine at the Keck School, and colleagues finding that at least 8 percent of more than 300,000 cases of childhood asthma in Los Angeles County can be attributed to traffic-related pollution. In those cases, the children were living in homes within 75 meters of a busy roadway. McConnell said other diseases may be caused or exacerbated by urban air pollution, including atherosclerosis, lung cancer, chronic obstructive pulmonary disease and neurological disorders. "Thus, policies to combat climate change may have near-term health benefits beyond reducing the burden of disease due to asthma," he said.

A Sept. 24 article in *Pravda* (Russia) covered research by **Mariana Stern**, associate professor of preventive medicine at the Keck School, finding that pan-fried meats may increase the risk of prostate cancer.

A Sept. 22 broadcast on CBS News Los Angeles

affiliate KCBS-TV featured an in-studio interview with **Leslie Saxon**, professor of clinical medicine and chief of the division of cardiovascular medicine at the Keck School, about atrial fibrillation, a potentially life-threatening disorder that affects the heart.

A Sept. 21 story on KTAR-FM reported research by **Ihab Hajjar**, assistant professor of medicine at the Keck School, finding that angiotensin receptor blocker therapy may cut the risk of Alzheimer's disease. "To our knowledge, this is the first human evidence to suggest that treatment with ARBs may have a selective beneficial effect on amyloid metabolism," Hajjar wrote.

A Sept. 21 article in *Medical Xpress* noted that **Berislav Zlokovic**, director of the Zilkha Neurogenetic Institute at the Keck School, is part of a scientific team that is developing an experimental drug that could reduce brain damage after a stroke.

A Sept. 20 report by the *Business Journals* featured the creation of the USC/UKRO Kidney Research Center at the Keck School of Medicine of USC. The new research center, a partnership of USC and the University Kidney Research Organization, will conduct both basic and applied research at USC. The center will be run by the Keck School's nephrology division, chaired by **Vito Campese**, professor of medicine at the Keck School.

Calendar of Events

This Calendar of Events is also online at www.usc.edu/hsccalendar for the Health Sciences campus community

Saturday, Sept. 29

9 a.m. – **1 p.m.** USC Norris Cancer Hospital women's cancer event. "Understanding Risks and Treatment Options for Women's Cancers." Various speakers. Free event. KAM Mayer Auditorium. Info: (323) 865-3962.

Sunday, Sept. 30

7 - 9 a.m. Registration. 11th Annual Kickin' Cancer 5k Walk/Run & Family Expo. San Vicente Blvd., Brentwood, CA. Every dollar raised supports the early detection and prevention of women's cancers. The race starts at 9 a.m. To join the USC Norris team or for more information: (323) 865-0668

4 - 7 p.m. Keck Hospital of USC Guild Benefit. "Celebrate the Classics...Classic Cars, Classic Food and Classic(al) Music," Flying a Garage, Pasadena. \$75 per person. Info: Janie@jfinteriors.com

Tuesday, Oct. 2

Noon. Psychiatry Grand Rounds. "California's Mentally Disordered Offender Law," Joseph Simpson, VA Long Beach. ZNI 112. Info: (323) 442-4065

Thursday, Oct. 4

9:30 a.m. - 1:30 p.m. Center for Excellence in Research Workshop. "Harmonizing Health Data: Tools to Improve Health Policy Research," Dana Goldman, Julie Zissimiopoulos and Patricia St. Clair, USC. UPC UGW Schaeffer Center 100B. Info: (213) 740-6709

Friday, Oct. 5

11 a.m. Hematology Grand Rounds. "Delayed Transfusion Reactions – The Bugaboo for Clinicians and Transfusion Medicine Specialists," Ira Shulman, USC. IPT C2J103. Info: (323) 865-3950

Noon. Medicine Grand Rounds. "Coccidioidomycosis," Sammie Cheng, USC. IPT C2J104B. Info: (323) 226-7556

Monday, Oct. 8

1 - 3 p.m. SC CTSI Career Development Seminar Series."Managing People and Creating High Performance Teams,"Terance Wolfe, USC. CSC 250. Info: (323) 442-8281

Tuesday, Oct. 9

Noon. Psychiatry Grand Rounds. "Maternal Depression and Disrupted Attachment: Implications for Mental Health Across the Lifespan," Diana Lynn Barnes, The Center for Postpartum Health. ZNI 112. Info: (323) 442-4065

Wednesday, Oct. 10

2 - 4 p.m. Center for Excellence in Research Workshop. "Early Career/Young Investigator Proposal Workshop," James Murday, USC. NML West Conference Room. Info: (213) 740-6709

5 - 8:30 p.m. "Primary Care Week at the California Endowment," moderated by Carmen Puliafito, USC. Various speakers. Info: (323) 442-1328

Thursday, Oct. 11

4 - 6 p.m. Center for Excellence in Research Workshop. "Writing Persuasive Proposals," Bonnie Lund, The Writing Company. This is the first of three sessions (Oct. 25 & Nov. 8). NML West Conference Room. Info: (213) 740-6709

Friday, Oct. 12

 $\bf 8:30~a.m.$ "Surgical Grand Rounds," Joseph Carey, USC. DOH 100. Info: (323) 442-9064

11 a.m. Hematology Grand Rounds. "Von Willebrand Disease Diagnosis and Management," Carol Kasper, USC. IPT

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.

Nobel Laureate delivers lecture to remember

By Ryan Ball

There are things we forget, for instance where we put our keys or the name of that guy who's waving to us from across the room.

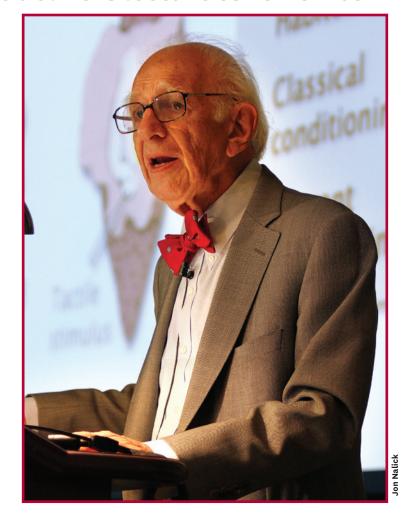
Other things are burned into our brains and we couldn't forget them if we wanted to. So what are the mechanisms that dictate what gets stored permanently on our internal hard drives and what gets booted to the recycle bin? Nobel laureate Eric Kandel looked to snails to find answers.

"How do you remember your first love experience for your whole life?" Kandel asked, speaking to a packed house at Mayer Auditorium on Sept. 20.

In his Irene McCulloch
Distinguished Lecture in
Neuroscience "A New Class
of Functional Prions and the
Perpetuation of Memory
Storage," he examined the
two major forms of long-term
memory—explicit, which
requires conscious attention,
and implicit, which is based on
learned fear and sensitization.

He found that both require repetition to convert experience from short-term to long-term memory, and that transition requires new protein synthesis and altered gene expression.

For his test subjects, Kandel chose a type of snail known as aplysia, which have very simple brains. By administering a series



Nobel laureate Eric Kandel presents a lecture on his memory research to a packed audience at Mayer Auditorium on Sept. 20. Kandel discussed the factors that convert short-term memories into long-term ones.

of shocks to their tails, he was able to study the simple neural circuit and how the repetition of sensitization training leads to altered gene expression and the growth of new synaptic connections necessary for the formation of implicit long-term memory.

While the snails may not have brains as complex as us humans, our genetic makeup

is not as different as we would like to believe.

Kandel's findings in our slimy cousins offer new understanding of the processes by which our own memories are formed and stored, and may one day help us to gain better control over what we keep and what we throw out, like where we put those keys.

PHARMACY: Changes designed to spur efficiency and reduce costs

Continued from page 1

because they were mixed in an environment that was less contained. "Now, if we don't use something, we will be able to recycle it and so there will be less waste," she said.

They also changed the process for mixing the solutions that is less time-consuming and involves fewer people moving in and out of the sterile area, where they are required to wear gowns, masks and shoe covers.

"This is going to help improve efficiency and it is going to drive down costs," said Melanie Joe, director of pharmacy services.

A good start, to be sure, but the administrators of the pharmacy have several more changes they plan to implement in upcoming months—both changes to the physical space and to their

own procedures—that they hope will bring yet another

level of efficiency to the pharmacy operations.

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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.