



Clockwise from top left: USC senior Bianca Carneiro is pulled from a building for immediate attention; a victim receives a triage tag alerting rescuers that her injuries are relatively minor and that she does not need urgent attention; search and rescue teams fan out across the campus; a hazmat team responds to a report of a chemical spill; a television reporter interviews victims and rescue workers about what they learned from the experience; Alex Avila, a senior at Bravo High School, gets squirted with fake blood in preparation for his role as a disaster victim. Photos by Jon Nalick.

## Keck School gets ARRA grants worth \$34 million

By Leslie Ridgeway

Faculty researchers at the Keck School of Medicine of USC have won a total of \$34 million in grants as part of the American Recovery and Reinvestment Act (ARRA).

ARRA, which was passed by Congress and signed into law in February 2009 by President Obama, is designed to fund research projects that will stimulate the economy and create or retain jobs while potentially making significant scientific progress over the next two years.

On Oct. 21—National Medical Research Day—Keck School of Medicine leaders noted that the ARRA awards represent a surge of federal support for the school.

“Competition for these grants was intense, so the success of our faculty speaks to the quality of our scientific enterprise and the determination of our investigators,” said Keck School Dean Carmen A. Puliafito.

“I’m proud to recognize their tireless efforts and stellar accomplishments,” he said.

Among the grants is a nearly \$9 million Grand Opportunity grant awarded to two USC neuroscientists—James A. Knowles, professor of psychiatry at the Keck School, and Pat Levitt, director of the Zilkha Neurogenetic Institute—to map how genes are expressed in different regions of the human brain throughout development. The project will be done in collaboration with researchers at Yale University and the Allen Institute for Brain Science in Seattle, Wash.

See **ARRA**, page 3

## Humayun elected to Institute of Medicine

By Meghan Lewit

USC ophthalmologist and biomedical engineer Mark Humayun has been elected to the prestigious Institute of Medicine (IOM) for his groundbreaking work to restore sight to the blind. The IOM made the announcement on Oct. 12 at its 39th annual meeting.

Election to the IOM is considered one of the highest honors in the fields of health and medicine and recognizes individuals who have demonstrated outstanding professional achievement and commitment to service.

Humayun is professor of ophthalmology, cell and neurobiology, and biomedical engineering at the Keck School of Medicine of USC, the Doheny Eye Institute at USC and the USC Viterbi School of Engineering. His research projects focus on the treatment of the most debilitating and challenging eye diseases through advanced engineering.

He is also the director of the Department of Energy Artificial Retina Project and co-inventor of the retinal prosthesis—an implantable artificial retina that has restored partial sight to



Mark Humayun

Steve Cohn

See **HUMAYUN**, page 2

## HSC drills to be the master of any disaster

By Katie Neith

About 300 volunteers from both USC campuses participated in an earthquake drill held on the Health Sciences Campus on Oct. 15.

Coordinated by USC Fire Safety and Emergency Planning, the drill was part of a statewide emergency preparedness initiative called the Great California ShakeOut.

At 10:15 a.m., faculty, staff and students across USC were encouraged to drop, cover and hold on to simulate response to an actual earthquake. On the Harry and Celeste Pappas Quad at the Health Sciences Campus, response and

rescue team volunteers from both campuses gathered to activate the university’s disaster medical response plan.

Adding an element of grim realism were 35 volunteer victims, who were made up with “injuries” ranging from bumps and bruises to amputated hands and feet or objects protruding from their bodies. Twenty-three of the volunteers were from nearby Bravo Medical Magnet High School and 12 were Health Sciences staffers.

Members of the USC Community Emergency Response Team (CERT) searched three buildings

for victims and damage. CERT is a 21-hour FEMA certification course taught by nationally certified instructors. In the event of a major disaster, the team is a multi-functional volunteer response group that acts as an adjunct to existing emergency response service departments at the university.

Health care workers and other volunteers triaged and treated the 35 victims on the quad.

“I think the drill went smoothly and improved over last year,” said CERT volunteer Carol Parker, a special project manager from the

See **DRILL**, page 2

## Levitt welcomed as Zilkha Neurogenetic Institute director

By Katie Neith

Pat Levitt, director of the Zilkha Neurogenetic Institute (ZNI) at the Keck School of Medicine of USC, was officially welcomed to USC in a jovial reception co-hosted by Keck School of Medicine Dean

Carmen A. Puliafito and USC School of Pharmacy Dean R. Pete Vanderveen on Oct. 13.

Wine flowed, a three-piece band played and sweet and savory treats were abundant at the celebration held in the Herklotz Seminar Room at the ZNI.

An esteemed neuroscientist from Vanderbilt University, Levitt arrived at USC on July 1 after a nationwide search for a ZNI director.

He also serves as chair and professor of cell and neurobiology at the Keck School and the Provost's Professor of Neuroscience, Psychiatry and Pharmacy at the USC School of Pharmacy.

"This is a very special day—not only for our School of Pharmacy and our Keck School of Medicine, but for the entire USC community," said USC Executive Vice President and Provost C.L. Max Nikias. "Dr. Levitt creates a vital link between pharmacy and medicine, whose disciplines will only increase in importance as this century unfolds."

Since his arrival, Levitt has secured nearly \$9 million in American Recovery and Reinvestment Act funds to map how genes are expressed in different regions of

the human brain throughout development. He will lead the two-year Grand Opportunity grant, funded through the National Institute of Mental Health, with James A. Knowles, professor of psychiatry at the Keck School of Medicine, and researchers at Yale University and the Allen Institute for Brain Science in Seattle, Wash.

Levitt also recently received a \$2.4 million grant from the Simons Foundation Autism Research Initiative to conduct research on the effects of gene mutation and pollution on autism spectrum disorder.

At the reception, Levitt thanked his laboratory members who moved with him to USC and praised his new staff at ZNI for helping him with a smooth transition to his new position. He also emphasized his excitement about the potential he sees at USC.

"This university stands as being a remarkable place where scholarship and creativity go hand in hand. In terms of big science, we are central to the largest initiatives that the National Institutes of Health are undertaking in several areas," said Levitt. "We have the potential, in neuroscience, to do something really special university-wide."



Jon Nalick

USC Executive Vice President and Provost C.L. Max Nikias welcomes Pat Levitt, director of the Zilkha Neurogenetic Institute, at the Oct. 13 reception in his honor.

## HUMAYUN: Researcher-physician joins highly selective Institute of Medicine

Continued from page 1  
blind patients.

"I am extremely honored to be elected into the Institute of Medicine," Humayun said. "I would like to thank my colleagues and my family for their support, and I am looking forward to contributing as a member to the Institute of Medicine."

Humayun has been voted one of the Best Doctors in America and has received numerous research awards, including being named Innovator of the Year by *R&D Magazine* in 2005.

"The election of Mark Humayun to the Institute of Medicine is a great honor that recognizes his status

as an outstanding leader in bioscience," said Keck School of Medicine Dean Carmen A. Puliafito. "Dr. Humayun's dedication to medicine and science, and his commitment to collaboration across disciplines, has profoundly improved the quality of life for many patients."

Dana Goldman, professor and the Norman Topping Chair in Medicine and Public Policy at the USC School of Policy, Planning and Development, was also elected to the IOM. Goldman oversees the newly created Leonard D. Schaeffer Center for Health Policy and Economics at USC and also has a faculty appointment at the School of Pharmacy.

Goldman is a nationally-recognized health economist influential in both academic and policy circles. He is the author of over 100 articles and book chapters, including articles in some of the most prestigious medical, economic, health policy, and statistics journals. He is a health policy advisor to the Congressional Budget Office, and is a frequent speaker on health care issues.

New IOM members are elected by current active members through a highly selective process that recognizes individuals who have made major contributions to the advancement of the medical sciences, health care and public health. IOM's total membership is 1,778.

## DRILL: 'Successful' HSC event makes disaster preparedness as realistic as possible

USC School of Dentistry. "What I learn here, no matter where I am, it will be useful."

Overall, the drill was a success, according to Steve Goldfarb, fire safety and emergency planning specialist with USC Career and Protective Services. He credited the addition of a new USC amateur radio group with helping keep the lines of

communication open.

"This may be the first time in the history of our drills that we can honestly say communication went well," he said. "The amateur radio group was the thread that pulled things together."

Goldfarb noted that all of USC will participate in the ShakeOut annually. The next Great California ShakeOut

is scheduled to take place on Oct. 21, 2010, at 10:21 a.m.

The drill was covered by 15 news media outlets including KABC-TV, KTLA-TV, Associated Press, KRCA Channel 62, the *Daily Trojan* and Trojan Vision.

At USC University Hospital and USC Norris Cancer Hospital, about 50 members of hospital leadership (35 from

USCUH, 15 from Norris) participated in separate emergency management drills with the CommandAware hospital event management system. This online system allows hospital management to communicate needs both inside the hospital and with other outside hospitals, coordinate emergency response quickly, and facilitate post-emergency action reports.

"This is a new software that automates all communication and requests for assistance during a disaster," said Pedro Ayala, hospital safety disaster officer for USC University Hospital and USC Norris Cancer Hospital. "Hospital personnel can log into the system after a disaster and let the situation commander know about problems throughout the hospital."

In the event that a disaster occurs after hours, hospital staff can log in to the system remotely.

Hospital leadership can then communicate with staff at the location and manage the early stage response in the

event they are unable to get to the hospital.

"Prior to this software being in place, all our preparedness drills were done with paper and pencil," said Ayala. "If there is a power outage so that we cannot use the system, we'll go back to that paper and pencil."

The software system also facilitates ongoing emergency response planning.

"One of the things the software can do is that we can load our emergency plan onto the system, prepare annual reviews and set specific needs for mitigation planning," said Ayala.

The CommandAware system is supported through a grant program from the County of Los Angeles for hospital emergency preparedness.

"It's a really nice overall tool at our disposal to manage the planning for and reaction to disasters," said Ayala.

For photos from the day's drill, go to [www.usc.edu/hsc/info/pr/ShakeOut09/ShakeOut09.html](http://www.usc.edu/hsc/info/pr/ShakeOut09/ShakeOut09.html)

The Weekly

Next Issue: Oct. 30

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## Hundreds turn out for USC-sponsored health fair

By Joe Peters

Hundreds of local residents flocked to the Oct. 17 Health and Wellness Fair, which featured music and more than 50 booths offering health-related information.

The event, made possible by donations to the USC Good Neighbors Campaign, was hosted at the East Los Angeles Occupational Center and sponsored by the Health

Sciences Campus. The USC Neighborhood Outreach event included remarks from Los Angeles City Councilmember Jose Huizar and a radio broadcast of the USC-Notre Dame football game.

But for community members, the biggest draw was the chance to air their health concerns and get medical advice from experts.

"This was very important

for me, to check out all these tests," said Soledad Sanchez, who brought her daughter and grandson to the fair. "I got my flu shots, my cholesterol checked, my diabetes checked."

She was also enthusiastic about the information booths, particularly the one staffed by police: "I liked the information about keeping kids from drugs. I learned a

lot today. Everyone should see this."

Cesar Armendariz, community outreach director for HSC, echoed those sentiments. "It's a chance for people in the community, especially those with low income and without health insurance, to get some critical screenings," he said. "People of any age group can come and benefit from the fair."

## New Web site highlights USC's community outreach programs

By Eddie North-Hager

It's no secret that USC, which recently was named tops in community engagement among all colleges and universities, has a multitude of flourishing programs and projects in the neighborhoods surrounding its campuses.

But finding out about all these initiatives—and getting a sense of the richness of activity in the neighborhoods—has in the past involved a lot of digging.

A new USC Web site solves that problem.

Our Communities ([http://](http://communities.usc.edu)

[communities.usc.edu](http://communities.usc.edu)), launched in September by the USC Office of Government and Community Relations and University Public Relations, documents the university's outreach and research across various disciplines and campuses.

It includes descriptions of collaborative programs, recent photographs of Trojans and neighborhood residents engaged in projects, and supplies detailed maps of neighborhood resources, including schools, parks, churches, museums and

historic buildings.

The site targets the university-community initiatives started by President Steven B. Sample when he joined the Trojan Family.

These initiatives were a key element of the president's goal to make a difference in the communities surrounding the University Park and Health Sciences campuses.

"This site illustrates some of USC's core missions in the communities: putting students on the path to college from head start through high school;

stimulating the local economy; and making neighborhoods safer," said Thomas S. Sayles, USC vice president for government and community relations. "It shows the depth and breadth of USC's efforts and our commitment to the neighborhood.

"We are now able to more clearly define our outreach to include not only programs that serve the community, but the academic research that our professors are doing," Sayles said. "These studies are informing policymaking decisions that result in services to these neighborhoods and others like it."

Susan Heitman, associate senior vice president of university public relations, said: "When he arrived nearly 20 years ago, President Sample made our relationship with the community the hallmark of his administration."

"He set hugely ambitious goals. He believes in the concept of being a good neighbor, and we have that responsibility."

"This Web site is our latest effort in building this partnership in our community," she said.



### FIGHTING FOR A CANCER CURE, ONE CUPCAKE AT A TIME

USC sophomore Tiffany Zing shows off the strawberry cupcake she bought on Oct. 20 from a Sprinkles truck on Trousdale Parkway at UPC. All the proceeds from the sales of the \$4 cupcakes went to support breast cancer research through the Entertainment Industry Foundation Women's Cancer Research Fund, which supports Norris.

Allison Engel

## ARRA: Keck School officials credit faculty creativity, skills for jump in funding

Continued from page 1

Keck School of Medicine researchers have also been awarded four ARRA P30 grants—one shared with the USC School of Dentistry—totaling \$4.5 million to support junior faculty recruitment in the areas of autism, cancer, lung disease and craniofacial biology.

Elizabeth Fini, vice dean for research at the Keck School, said she expects the \$34

million to increase as additional ARRA grant applications are funded.

"These ARRA grant awards are a symbol of who we are and what we represent to our peers in the national research community," Fini said.

She added, "They are due to the creative ideas and exceptional skills of our longstanding faculty researchers, as well as junior faculty and new chairs and research leaders we've recently recruited."

## The Weekly NEWSMAKERS

On Oct. 19, NBC's "The Today Show" interviewed chief of the division of geriatric, hospital, palliative and general internal medicine **David Goldstein** about ethical issues involved in over-prescribing medication.

An Oct. 19 ABCNews.com article quoted professor of obstetrics and gynecology and chief of the division of reproductive endocrinology and infertility **Richard Paulson** about women in their 40s having children.

An Oct. 15 *New York Times* article highlighted USC's participation in the great California ShakeOut and reported that the Health Sciences Campus staged a mass casualty drill with mock victims. The Associated Press, KABC-TV, KTLA-TV, *La Opinion*, *the Daily Breeze*, *the Ventura County Star*, KCRW-FM, KRCA-TV (Channel 62), KSCI LA 18 TV (Chinese), KBS-TV (Korean), NHK TV (Japan), GMTV (Britain), European Press Agency, Zuma Press, the *Daily Trojan*, Trojan Vision, and Annenberg TV News also covered the drill.

An Oct. 15 *La Opinion* article highlighted a health fair co-sponsored by USC.

On Oct. 14, KABC-TV interviewed professor of ophthalmology **Mark Humayun** about the retinal implant project.

On Oct. 13, KPCC-FM highlighted a study led by associate professor of preventive medicine **Michael Cousineau** which found that L.A. taxpayers would save \$20,000 a year in public services for every homeless person moved off the streets and into permanent housing. *La Opinion*, *Contra Costa Times*, *Long Beach Press-Telegram*, KTTV-TV, KMEX, KCBS-TV, KCRW-FM, KABC-AM and LA Observed also covered the research.

An Oct. 9 *Forbes* article quoted chief of cardiovascular medicine **Leslie Saxon** and featured topics discussed at the Body Computing Conference held recently at USC. The conference was also featured in *Fast Company Magazine*.

# Calendar of Events

This Calendar of events is also online at [www.usc.edu/hscalendar](http://www.usc.edu/hscalendar) for the Health Sciences Campus community

## Saturday, Oct. 24

**8 a.m.** Office of Continuing Medical Education and the Division of Cardiovascular Medicine Course. "Current Diagnosis and Management of Atrial Fibrillation," Various speakers. KAM Mayer Aud. Info: (323) 442-2555

## Monday, Oct. 26

**Noon.** Liver Grand Rounds. "Case Presentations," Joon Kim, USC. IPT C3J101. Info: (323) 409-7995

**Noon.** KSOM Research Seminar. "Anti-angiogenic VEGF Isoforms: Their Role in Cancer and Eye Disease," David Bates, Univ. of Bristol, UK. NRT Aresty Aud. Info: (323) 442-1144

## Tuesday, Oct. 27

**9 a.m.** Neurology Grand Rounds. "Sleep and Fatigue in Residency: Duty Hours Present and Future," Laura Kalayjian, USC. ZNI 112. Info: (323) 442-7686

**11 a.m.** Endocrinology Grand Rounds. "Thyroid Hormone Therapy in Adults with Nonthyroidal States," Elaine Kaptein, USC. HMR 100. Info: (323) 442-2806

**11:30 a.m.** Psychiatry Grand Rounds. "Perinatal Anxiety Disorders: It's Not Just About Depression Anymore," Shari Lusskin, Mt. Sinai Medical Ctr. ZNI 112. Info: (323) 442-4065

**Noon.** Cancer Center Grand Rounds. "Colorectal Cancer Genomes: How Many Somatic Changes in a Cancer?" Darryl Shibata, USC. NRT Aresty Aud. Info: (323) 865-0801

## Wednesday, Oct. 28

**8:30 a.m.** "Sleep and Fatigue," Joshua Sapkin, USC. GNH 11-321. Info: (323) 226-7923

**Noon.** Renal Grand Rounds. "Renal Biopsy," Michael Koss and Vito Campese, USC. GNH 4420. Info: (323) 226-7337

## Friday, Oct. 30

**8 a.m.** CHLA Grand Rounds. "Noninvasive Assessment of Tissue Iron Stores: From Bedside to Bench and Back Again," Thomas Coates and John Wood, USC/CHLA. Saban Research Aud. Info: (323) 361-2935

**8 a.m.** Pathology and Laboratory Medicine Grand Rounds. "Fluidic Miniaturization and Its Biomedical Applications," Emil Kartalov, USC. NOR 7409. Info: (323) 442-1180

**11 a.m.** Hematology Grand Rounds. "Autoimmune Hemolytic Anemia," Howard Liebman, USC. IPT C2J103. Info: (323) 865-3950

**Noon.** Gastrointestinal Grand Rounds. "Case Presentations," Sarah Sheibani, USC. OPT A5C129. Info: (323) 409-7995

## Tuesday, Nov. 3

**11:30 a.m.** Psychiatry Grand Rounds. "Suicidal Behavior in Bipolar Disorder: Risk Factors and Interventions," Maria Oquendo, Columbia Univ. ZNI 112. Info: (323) 442-4065

## Thursday, Nov. 5

**10 a.m. – 3 p.m.** HSC Benefits Fair. Harry & Celesta Pappas Quad. Info: (323) 442-1011

## Saturday, Nov. 7

**9 a.m.** 8th Annual Moving Targets Symposium. "Drug Delivery and Therapeutics to the Tumor Microenvironment," Various speakers. Radisson Hotel, Los Angeles @ USC. Info: bayan@usc.edu

## Wednesday, Nov. 18

**8:30 a.m.** "Building Pharmaceutical Anti-Counterfeiting Programs," Various speakers. CHP 106. Info: (323) 442-3102

**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 HSC Weekly, KAM 400 or fax to (323) 442-2832, or e-mail to [eblaauw@usc.edu](mailto: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.



At the Oct. 12 garden unveiling are, from left: Keck School Dean Carmen A. Puliafito, Kelly Meyer, Quinn Ezralow, Jamie Tisch, Anne Douglas, Marion Laurie, and Peter Jones, director of the USC Norris Comprehensive Cancer Center

## Hospital garden named for Women's Cancer Research Fund

By Katie Neith

Members of the Women's Cancer Research Fund (WCRF) gathered in the courtyard of the USC University Hospital Norris Inpatient Tower on the afternoon of Oct. 12 to celebrate the unveiling of a garden named in their honor.

Part of the Entertainment Industry Foundation, the WCRF is a long-time supporter of the USC Norris Comprehensive Cancer Center.

About 40 invited guests gathered to applaud the support of the WCRF. The audience included world-class researchers and distinguished leaders in WCRF-funded cancer research who attended the WCRF Breast Cancer Biomarker Discovery Project's annual Scientific Meeting earlier that day at the Keck School of Medicine.

Peter Jones, director of the USC Norris Comprehensive Cancer Center, welcomed guests to the gathering and thanked the WCRF for supporting cancer research. Keck School Dean Carmen Puliafito recognized the individual founders of the fund, including Anne Douglas, Quinn Ezralow, Marion Laurie, Kelly Meyer and Jamie Tisch, as well as EIF president and CEO, Lisa Paulsen.

The speakers also acknowledged the work of

Renette Ezralow, the late wife of USC Norris supporter Marshall Ezralow and a founder of the WCRF.

"The reason I work on ovarian and breast cancer is because of her," said Parkash Gill, Ezralow Family Chair in Cancer Therapeutics and featured speaker at the event. Debu Tripathy, professor of clinical medicine and co-leader of the Women's Cancer Program, also spoke briefly about progress in research and hope for the future.

The WCRF founders and Paulsen were awarded plaques to commemorate the day.

"We are overwhelmed by this beautiful garden," said WCRF founder Laurie. "It gives us all the more impetus to work harder and harder."

Quinn Ezralow thanked the researchers at USC for their imagination and their knowledge.

"Together, we can truly imagine a future without breast cancer because of the incredible knowledge you bring to discovering new treatments, and ultimately, a cure," she said.

Also in attendance was actor Kirk Douglas, husband of WCRF founder Anne Douglas. After the garden reception, guests were treated to a dinner at the home of Dean Puliafito.

## The Weekly gets top honors in 2009 CASE awards

As part of its 2009 Awards of Excellence honoring outstanding university publications and programs, the Council for Advancement and Support of Education (CASE) has awarded *The Weekly* a prestigious gold medal.

*The Weekly* received the top award in the category of internal audience periodicals; publications at Claremont Graduate University and California State University Fresno received silver and bronze awards in the category.

*The Weekly*, with a circulation of about 7,000,

serves the students, staff, faculty and residents of USC's Health Sciences Campus.

It is written, produced and published by the Health Sciences Public Relations and Marketing Office.

CASE, a Washington, D.C.-based nonprofit organization, is a professional association serving educational institutions and the advancement professionals who work on their behalf in alumni relations, communications, development, marketing and allied areas.

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