

Obama to honor Humayun

Argus II pioneer tapped for National Medal of Tech, Innovation

By Robert Perkins

President Barack Obama will bestow the National Medal of Technology and Innovation to Mark Humayun, MD, PhD, at a ceremony in Washington, DC, this month.

Humayun, who holds joint appointments at the Keck School of Medicine of USC and the USC Viterbi School of Engineering, is the inaugural Cornelius

Pings Professor of Biomedical Sciences and professor of ophthalmology, biomedical engineering, and cell and neurobiology.

He earned worldwide acclaim through his development of a retinal prosthesis system that helps individuals with a certain type of blindness to see. A recent iteration of that system, the Argus II, became the first retinal implant to receive

FDA approval two years ago.

“Mark Humayun is such a deserving recipient of this prestigious honor,” said USC President C. L. Max Nikias, PhD. “He dreamed the impossible: to help the blind see. With fearless imagination, bold leadership and biomedical expertise, he and his team made that dream come true with the world’s first artificial retina.

See **HUMAYUN**, page 3



Mark Humayun

Chris Shinn



Douglas Morino

Currie Hall, a new student housing complex on the northeast corner of Alcazar and San Pablo streets, is scheduled for occupancy in September. The complex will have 178 units and a child care center.

Construction boom changing HSC look

By Douglas Morino

Construction projects continue to move forward across the USC Health Sciences Campus.

From new clinical and research buildings and student housing units to parking areas, tree-lined sidewalks and a new hotel, a series of projects are underway at the 79-acre campus to transform the area into an oasis of medical research and health care.

“This work is being done to ensure Keck Medical Center of USC remains a leader of cutting-edge research and world-class health care for generations to come,” Tom Jackiewicz, senior vice president and CEO of Keck Medicine of USC, said during a ceremony in September to mark the latest construction milestone: The final steel beam was placed atop the Norris Healthcare Center, a building next to Keck Hospital of USC representing the ongoing connection of the Norris Family to USC.

“It’s an exciting and historic time to be at Keck Medicine,” Jackiewicz added.

The new hotel and student housing complex are being funded by private developers, while construction of the Norris Healthcare Center is being funded by USC, along with the Norris Foundation and other donors.

Now little more than a skeleton of concrete and steel, the Norris Healthcare Center stands near the corner of Alcazar and San Pablo streets and be a place for innovative treatment and compassionate care. The center will have an ambulatory surgery center, a women’s cancer program,

Shuttle times, routes shift

The ongoing construction across HSC has caused changes in bus and tram routes and schedules:

- Union Station/Intercampus Shuttle bus stop location has moved around the corner to Eastlake (just west of San Pablo Street).
- The Circuit Tram Route and times are the same, but the starting point now is at Lot 71.
- The Circuit Tram, Soto and Alhambra bus stop on Eastlake has moved northwest, in front of the glass door entrance to Radiation & Oncology.
- The Soto Shuttle runs every 15 minutes and has been rerouted. The affected stops are: the Eastlake stop (mentioned above); the corner of Alcazar and San Pablo no longer are serviced; and the CSC stop has moved east onto Playground Street just before the stop sign.

the region’s first comprehensive multiple sclerosis clinic, a state-of-the-art infusion center and several new dining options. The center is the first new medical building on the USC Health Sciences Campus in more than a decade and will expand outpatient care space by 36 percent, adding more than 100,000 square feet of space. The Norris Healthcare Center is scheduled for

See **CONSTRUCTION**, page 2

Faculty Council taking bigger role on both campuses

By Les Dunseith

Suzanne Palmer, MD, president of the Keck School of Medicine Faculty Council, smiles as she talks about the pragmatic aspect of leading the 4-year-old group, which is the only elected body representing the interests of the whole the Keck School faculty.

In 2012, the members first reached out directly to peers — a practice that has continued — to solicit opinions about how best to expand their on-campus role and focus their energy to bring about meaningful change. The No. 1 concern?

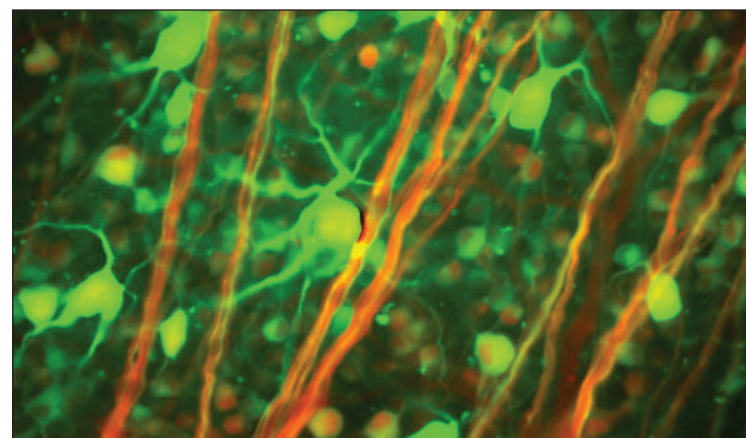
“The food on the campus,” Palmer recalled with a chuckle. “And in 2013 it was updat-

ing the Edmondson Faculty Center.”

So the Council worked with USC Hospitality services and was successful in upgrading the food offerings and dining environments available on campus. Dealing with such practical concerns is just one aspect of the Council’s mission.

“The faculty members elect us to represent the faculty on matters of general associated concern,” said Palmer, professor of clinical radiology and medicine. “We play an advisory role to the administration within the school and also an important role in representing the Keck School to the university as a whole.”

See **COUNCIL**, page 3



Andrew Weitz

Researchers discover a way to improve image sharpness

By Meg Aldrich

Retinal implants that deliver longer pulses of electrical current may noticeably improve image sharpness for individuals who have lost their sight due to retinitis pigmentosa, according to a new study by researchers from the USC Eye Institute and USC Viterbi School of Engineering.

The research was published in the peer-reviewed journal *Science Translational Medicine* online on Dec. 16.

Retinitis pigmentosa (RP) is

an inherited disease of the eye that causes blindness through gradual degeneration of photoreceptors, the light-sensing cells in the retina. The disease affects about one in 4,000 people. The Argus II retinal implant, also known as the “bionic eye,” was developed by a team of ophthalmologists and engineers at USC, including Mark Humayun, MD, PhD, the recipient of the National Medal of Technology and Innovation.

See **SHARPNESS**, page 2

CONSTRUCTION: New parking to open soon

Continued from page 1
completion in June 2017.

Construction, meanwhile, is nearly finished on a new six-level, 1,200-space parking structure on San Pablo Street, near Valley Boulevard. The structure is set to open at the end of January and will house staff vehicles, opening up parking for patients and families in the Keck structure, adjacent to Keck Hospital.

A new extended-stay 200-room Hyatt House hotel is slated to open in 2017 at the northeast corner of the San Pablo and Alcazar intersection. The hotel development will include 14,000 square feet of retail space, including a sit-down restaurant and 10,000 square feet of conference space.

Currie Hall, a new student housing complex, will stand just south of the hotel. The complex will have 178 units with about 450 beds and is scheduled for occupancy in September 2016. The ground floor will include a child care center with room for 130 children.

To help ease car traffic within the Health Sciences Campus, a new signalized intersection at Soto and Norfolk streets recently opened. The intersection provides an additional entrance to the campus and its completion marks another milestone in the \$35 million HSC Beautification Project — a multiyear construction initiative that includes 12 phases across the Health Sciences Campus.



Norris Healthcare Center, near Alcazar and San Pablo streets, will have the region's first comprehensive multiple sclerosis clinic.

Douglas Morino

Professor reflects on decades in medicine

By Melissa Masatani

Though decades have passed since Michael Kennedy, MD '66, MS, first enrolled at USC, he still thinks about the unlikely course of events that led the Chicago native to earn his degree from the Keck School of Medicine.

"It was all a surprise," Kennedy said recently. "I had no idea what to expect because nobody in my family had gone to college."

The Mission Viejo resident is a father of five, including USC graduates Michael Jr., '90, and Kathleen, '89, and has five grandchildren. In June, Kennedy published a memoir, "War Stories: 50 Years in Medicine," which reflects on his life and career in the operating room. But a career in medicine is not what the retired surgeon originally had in mind.

There were no student loans and few scholarships available to students in the mid-1950s, so the then-high school senior turned down a spot at the California Institute of Technology for a scholarship at USC's engineering program. After two years at USC, a series of events led him to work at the Douglas Aircraft Company, join the Air National Guard and, following a late-night conversation at the beach, apply for medical school. But even that decision had a hiccup, as his National



Ricardo Carrasco III

Michael Kennedy

Guard unit was called up a month after he started medical school, delaying enrollment for another year.

In the 50 years since, the medical field has changed drastically. But from Kennedy's perspective, which included more than 20 years on the surgical faculty at Los Angeles County + USC Medical Center and more than a decade as a professor in the Introduction to Clinical Medicine program at the Keck School, at least one thing has remained the same: high-quality educators.

"My first year of internship, a resident I was working with in the emergency department at (Massachusetts General Hospital) had been an intern

at County and he was always telling me rules he had learned at County, he would quote USC faculty for why he did things," Kennedy said. "And I thought, 'Wow, he's a resident at Mass General but he thinks so highly of USC.' He clued me in that USC faculty were really superior at teaching."

His time spent teaching first- and second-year medical students prompted him to write his first book, "A Brief History of Disease, Science and Medicine," in 2004.

"Every year I try to convert at least one of my students to surgery," he said. "It's fun when you can influence students, that's what I love about the classroom."

Calendar of Events

Friday, Jan. 15

6:30 a.m. Department of Anesthesiology Grand Rounds. "Quality Improvement in Perioperative Care," Michael Gropper, MD, PhD, UCSE. McKibben Lecture Hall, Room 256. Info: Renee Meadows, (323) 409-6856, rmeadows@usc.edu

11 a.m. Jane Anne Nohl Division of Hematology Center for the Study of Blood Diseases Grand Rounds. "Mouse Models of Hematologic Neoplasms As Tools for Target Discovery and Validation," Richard Van Etten, MD, University of California, Irvine. LAC+USC Medical Center Inpatient Tower Conference Room D. Info: Carolyn Castellanos, (323) 865-3913, castellanos_c@med.usc.edu

Saturday, Jan. 16

7 a.m.-5 p.m. Continuing Medical Education 2nd Annual Update on Esophageal Diseases Conference. USC course directors: Edy Soffer, MD, and John Lipham, MD. University Club of Pasadena. Info: Anika Bobb, (323) 442-2547, anika.bobb@med.usc.edu, <http://usc.edu/cme>

Tuesday, Jan. 19

5:30 p.m. Ophthalmology Grand Rounds. On-Tat Lee, MD. HC4 Conference Room, 3rd Floor. Info: Tyaisha Christopher, (323) 409-5233, Tyaisha.Christopher@med.usc.edu, <http://www.usceye.org>

Friday, Jan. 22

8:30 a.m. Medicine/Pulmonary, Critical Care Sleep Medicine Seminar. "Hastings Center for Pulmonary Research Seminar: Running to Stand Still: The Maintenance of Quiescence in the Adult Lung," Tien Peng, MD, UCSE. IRD 734. Info: Elva Rubio, (323) 226-7923, elvarubi@usc.edu

11 a.m. Jane Anne Nohl Division of Hematology and Center for the Study of Blood Diseases Grand Rounds. "The Surviving Mechanism in Acute Myeloid Leukemias," Chien-Shing Chen, MD, PhD, Loma Linda University, School of Medicine. LAC+USC Medical Center Inpatient Tower Conference Room D. Info: Carolyn Castellanos, (323) 865-3913, castellanos_c@med.usc.edu

Monday, Jan. 25

5:30 p.m. Visions and Voices Discussion. "What We Can Learn from a Severed Head: A Conversation with John Corey Whaley," Aresty Auditorium. Info: <http://visionsandvoices.usc.edu>, RSVP required

Thursday, Jan. 28

11 a.m. USC Stem Cell Seminar. Didier Stainier, Max Planck Institute for Heart and Lung Research, Eli and Edythe Broad CIRM Center Auditorium, BCC 101. Info: Cristy Lytal, (323) 442-2172, lytal@med.usc.edu, <http://stemcell.usc.edu>

Saturday, Jan. 30

7 a.m.-4:30 p.m. Continuing Medical Education 3rd Annual USC Multi-Disciplinary Breast Cancer Symposium. USC program organizers: Eric L. Chang, MD; Eugene Chung, MD, PhD, JD; Christy A. Russell, MD; Naomi R. Schechter, MD; Stephen F. Sener, MD. Intercontinental Hotel, Los Angeles. Info: Anika Bobb, (323) 442-2547, anika.bobb@med.usc.edu, <http://usc.edu/cme>

SHARPNESS: Implants let patients see motion, light

Continued from page 1

Retinal implants (artificial retinas) give people with RP the ability to perceive light, detect motion and locate large objects. However, because the implants may unintentionally stimulate axons in the retina, patients sometimes see large oblong shapes of light that reduce the quality of their vision. In order for patients to see more clearly, the images created by the implant should be made of focal spots of light.

Current implant technology stimulates the retina with brief pulses of electrical current roughly 0.5 millisecond (ms) in duration. The researchers found that increasing the duration of the stimulus pulses allows visualization of distinct focal spots of light.

"This is a huge step forward in helping restore sight for people with retinitis pigmentosa," said Andrew Weitz, PhD, assistant professor of research ophthalmology. "Being able to create focused spots of light is important. Think of each light spot as a pixel in an image. By arranging many light spots into the shape of an object, we can generate sharp images of that object. For those of us who wear glasses, imagine the difference between trying to read a distant neon sign with and without your glasses on. For

people with retinal implants, being able to see more clearly should have a big impact on their ability to recognize objects and navigate their environments. These improvements in vision can really boost a person's sense of independence and confidence."

The researchers tested various stimulus pulse durations in an animal model and validated their findings in a patient with an early version of the Argus retinal implant (Second Sight Medical Products, Inc.). The results indicated that longer pulse durations allowed the retina to be stimulated more precisely.

In the animal model, all pulses 8 ms and shorter activated axons, obscuring the ability to generate a focal spot of light. Sixteen-millisecond pulses also stimulated axons but to a much lesser extent. Pulses 25 ms and longer produced no evidence of axonal stimulation, instead resulting in focal spots of light.

"Our findings further support that it is possible for patients with RP to see forms using artificial vision," said James Weiland, PhD, professor of ophthalmology and biomedical engineering. "This makes a strong case for developing high-resolution retinal implants."

Notice: Calendar items are due at least 10 days before publication date. Timely submission does not guarantee publication in print. See more calendar entries at hscnews.usc.edu/calendar-of-events. Submit items at tinyurl.com/calendar-hsc. Include day, date, time, title of talk, first and last name of speaker, affiliation of speaker, location and a phone number/email address.

HUMAYUN

Continued from page 1

USC is tremendously proud to be Professor Humayun's academic home."

"The level of recognition is very exciting and very much a surprise," Humayun said. "I'm honored to be the recipient of this award."

The Argus II system restores some visual capabilities for patients whose blindness is caused by retinitis pigmentosa. RP is an inherited retinal degenerative disease that affects about 100,000 people nationwide.

"Science and technology are fundamental to solving some of our nation's biggest challenges," Obama said in a White House news release announcing the National Medal of Technology and Innovation honorees. "The knowledge produced by these Americans today will carry our country's legacy of innovation forward and continue to help countless others around the world. Their work is a testament to American ingenuity."

Humayun joined USC in 2001 after receiving his bachelor's degree from Georgetown University, MD and residency in ophthalmology at Duke University Medical School, PhD in biomedical engineering at the University of North Carolina and advanced fellowship training in retinal surgery from Johns Hopkins School of Medicine. In 2013, Humayun was named the inaugural director of the USC Eye Institute and interim chair of the USC Department of Ophthalmology.

He holds more than 100 patent and patent applications, and is a member of both the U.S. National Academies Institute of Medicine and the National Academy of Engineering.

The Argus II was first approved for use in Europe in 2011 and has been implanted in dozens of patients in clinical trials — often by Humayun himself.

The system uses a camera mounted on special glasses that sends a signal to an electronic receiver with 60 electrodes that is implanted inside the eye. The receiver sends signals to the retina that travel through the optic nerve to the brain, where they can be interpreted as a visual picture.

"These sort of things can only be accomplished if others join in and help you, and I've been very fortunate to have strong collaborators," he said.

The National Medal of Technology and Innovation was created in 1980 and is administered for the White House by the U.S. Department of Commerce's Patent and Trademark Office.

"The award recognizes those who have made lasting contributions to America's competitiveness and quality of life and helped strengthen the nation's technological workforce," according to a White House statement.

Study: New use for Parkinson's drug

By Meg Aldrich

Researchers at six of the nation's top ophthalmology institutions, including the USC Eye Institute, have discovered that a drug intervention commonly used for Parkinson's disease also may significantly delay or prevent age-related macular degeneration — the leading cause of blindness in the U.S., according to the National Eye Institute (NEI).

Research experts, including Andrew Moshfeghi,

MD, MBA, clinical trials director at the USC Eye Institute, found that patients who were administered the drug L-DOPA to treat Parkinson's disease, Restless Leg Syndrome (RLS) and other movement disorders, were significantly less likely to develop age-related macular degeneration or developed it up to eight years later than patients not taking the drug.

"The research is significant because it points to a possible association be-

tween L-DOPA and AMD risk that may also result in L-DOPA use leading to a later onset of AMD diagnosis," Moshfeghi said. "The hope is that this discovery may mean L-DOPA may play a protective role for AMD risk — the data also gives us new insights into potential treatment targets for this complex disease."

Future clinical studies will have to validate this preliminary finding.

After basic research on mice, the researchers ex-

amined the health records of 37,000 AMD patients or those taking L-DOPA for movement disorders at the Marshfield Clinic looking for racial disparities in AMD. The results showed AMD patients also taking L-DOPA received their eye diagnosis eight years later than those who had AMD but were not on the drug.

These results then were confirmed in a larger data set of 87 million patients nationwide where similar results were observed.

COUNCIL: HSC no longer 'out of sight, out of mind'

Continued from page 1

In 2014, members turned their attention to improving communication between the Health Sciences and University Park campuses by initiating a productive push to improve the visibility of the Keck School faculty and HSC at UPC.

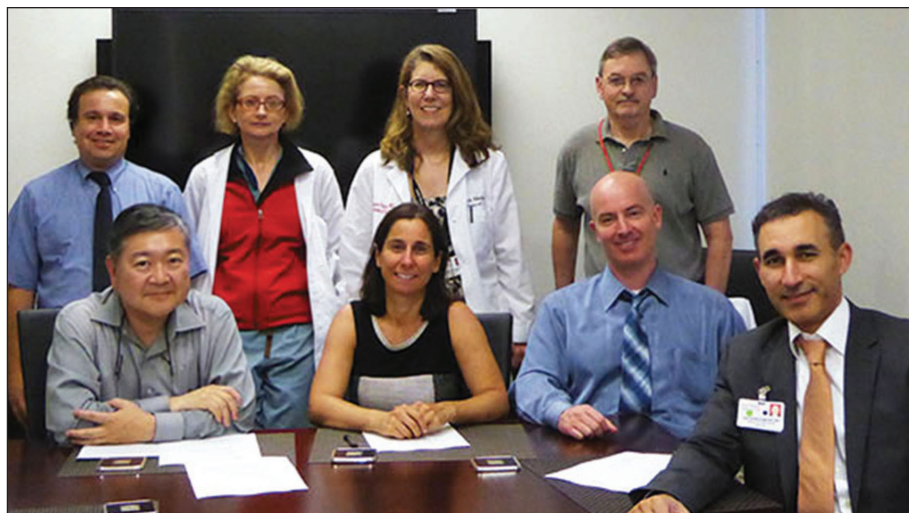
"Out of sight, out of mind," was the prevailing attitude on both campuses, Palmer said. "The Keck School can feel far removed from UPC. Most faculty members don't even know that we have a voice at the university."

Every school at USC has a Faculty Council that sends members to represent their interests on the university-wide Academic Senate. But last year, when Paula Cannon, PhD, was the Keck School's Faculty Council president, a concerted effort was made to get representatives from HSC — faculty from both the Keck School and the USC School of Pharmacy — involved in the Academic Senate and its subcommittees.

Soon, HSC representatives were moving into leadership roles.

Cannon, professor of molecular microbiology and immunology and a leading stem cell researcher at the Keck School, was elected academic vice president. Next year Cannon will be the president of the USC Academic Senate. Two others from HSC — Associate Professor of Pediatrics Donna Elliott, MD, EdD, and Professor of Pharmacy Clay Wang, PhD — now are serving with Cannon on the Senate's Executive Board.

With representatives from the Keck School well-positioned to make a university-wide impact, Palmer wants to make sure the HSC and Children's



Courtesy of Judy Garner

The Keck School of Medicine Faculty Council, back row from left: Joshua Sapkin, Claire Templeman, Suzanne Palmer, Andrew Ouellette; front row from left: Richard Watanabe, Rima Jubran, Amir Goldkorn and Sia Daneshmand. Not pictured is Richard Paulson.

Hospital Los Angeles communities know about it. For example, Cannon recently was announced as a member of a Sustainability Steering Committee that will implement a campuswide effort to reach 17 high-impact sustainability goals within the next five years.

A group known as the Medical Faculty Assembly had existed in prior years, but the group became dormant until the fall of 2011 when it was restarted and renamed the Keck School Faculty Council. Today, the Faculty Council consists of nine representatives (six clinical and three research) who serve for three years. The group regularly communicates with the Office of Faculty Affairs and the Dean, bringing forward problems and concerns identified by members of the faculty.

"Every year we want to identify at least one major issue that is important

to the welfare of the Keck faculty," Palmer said. "Our plans for this year include increasing the visibility of the Faculty Council at HSC and CHLA and supporting the on-campus movements to improve faculty wellness, professionalism and morale."

Palmer also is focusing her year as president on outreach. A big part of that effort will be the creation of a faculty-focused publication similar to the Research Quarterly that she expects to be distributed for the first time in April.

"We expect that the Keck School Clinical Quarterly will contain the up-to-date information we all should know regarding our clinical departments, including services available, their locations and personnel," she said. "Information we all need regarding career development and promotion also will be included."

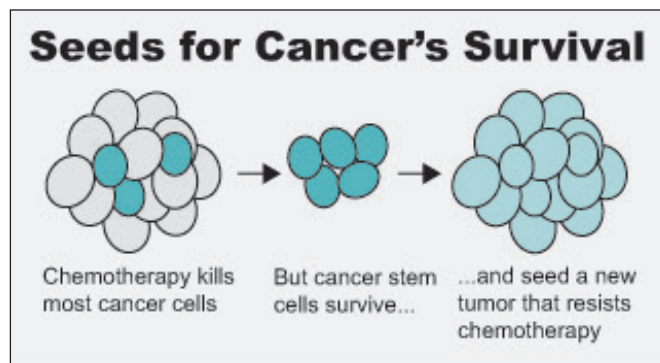
Scientists root out the 'bad seeds' of liver cancer

By Zen Vuong

Researchers have found the "bad seeds" of liver cancer and believe they could one day reprogram them to remain responsive to cancer treatment, a new study has found.

The key to disrupting the chemo-resistant stem cells that become liver tumors is to target the stem cell marker NANOG, said senior author Keigo Machida, PhD, associate professor of molecular microbiology and immunology at the Keck School of Medicine of USC.

NANOG is scarce in early-stage cancer but abounds in Stage III liver cancer. It promotes the cancer's spread by rewiring metabolism in the mitochondria.



Graphic by Alicia Di Rado

"We identified the Achilles heel in cancer therapy," Machida said. "There are bad seeds in cancer. Even though we treat patients with chemotherapy, those bad seeds survive and force relapse. That's why we would like to target the bad seeds in cancer to eradicate recurrence problems and metastasis, which is when the cancer spreads to other

parts of the body."

The study was published in the Jan. 12 issue of the journal *Cell Metabolism*.

Liver cancer is on the rise. An estimated 24,550 people died of the disease in 2015, according to the National Cancer Institute. Only 17.2 percent of people diagnosed with liver cancer survive for five years or more.

Researchers believe the study is the first scientific article to identify the carcinogenic pathway of stem cell marker NANOG and to posit NANOG as a target that will eliminate patient resistance to Sorafenib, the most common chemotherapy used on liver cancer patients.

NANOG controls the expression of genes that form "mitochondrial metabolic pathways" — energy sources — for stem cells that turn into tumors. It reprograms cells: Instead of using glucose as gasoline, they are ordered to use fatty acid.

"If we shut down this alternative pathway, the liver cancer will become sensitized to chemotherapy again," Machida said.

HSC Newsmakers

A roundup of news items related to Keck Medicine of USC, which may include philanthropic donations, research grants, publication in academic journals and mentions in the news media:



Hundreds of employees from the Keck School of Medicine of USC and the USC School of Pharmacy attended the annual holiday breakfast, hosted by Keck School Dean Carmen A. Puliafito and Interim Dean Glen L. Stimmel of the USC School of Pharmacy.

Keck, Pharmacy schools celebrate holidays with annual breakfast

CAROLS AND CANDY CANES BROUGHT the holiday spirit to the Health Sciences Campus on Dec. 18 as hundreds of employees from the Keck School of Medicine of USC and the USC School of Pharmacy attended the annual holiday breakfast. Keck School Dean Carmen A. Puliafito, MD, MBA, and Interim Dean Glen L. Stimmel, PharmD, of the USC School of Pharmacy greeted staff and faculty members on the Harry and Celeste Pappas Quad during the two-hour event, which featured a hearty breakfast that included quiche, waffles, hot chocolate and cider.

Cyclotron device now available for research, clinical use

USC INVESTIGATORS NOW have access to a state-of-the-art cyclotron and PET cGMP radiopharmacy at the Molecular Imaging Center, located at the Keck School of Medicine's Clinical Sciences Center. With the increasing demand for new and more sophisticated imaging probes for experimental research and clinical applications, the center has made the facility available for investigators to use the particle-accelerating device. The presence of the cyclotron will allow for the production of onsite radiopharmaceuticals for studies using Positron Emission Tomography (PET) scans, or whole-body imaging scans that allow doctors and researchers to view a patient's internal organs at the cellular level. To get more information or to make an appointment, go to <http://mic.usc.edu/contact-us/>.



Keck Medicine of USC and USC Department of Public Safety officials brought presents from a holiday toy drive to students from Santa Teresita School in December.

Department of Public Safety spreads cheer to local school

VOLUNTEERS FROM KECK MEDICINE OF USC and the USC Department of Public Safety visited Santa Teresita Elementary School in Los Angeles recently as part of their annual Holiday Toy Drive. The volunteers, including executive director of the department of public safety Chief John Thomas; healthcare security director Charles Holloway; Sgt. Roland Gallardo; and community service officer Monica Sandoval, set up an assembly line to distribute the toys to more than 240 students from kindergarten through eighth grade on Dec. 16. "Keck Medicine of USC and the USC Department of Public Safety look forward to the Holiday Toy Drive each year as a unique opportunity to bring joy to the community we work hard to protect," Holloway said.



A vendor sells a variety of fruit at the Lincoln Heights Farmers Market, held from 3 to 7 p.m. Wednesdays at North Broadway and Daly Street.

Farmers market creates healthy connections in local community

By Melisa Acoba

The arrival of farm-fresh fruits and vegetables signals the beginning of a new season. In Lincoln Heights, the scent of such produce has given rise to the neighborhood's curiosity over a relatively new phenomenon. Funded by the USC Good Neighbors Campaign, the Lincoln Heights Farmers Market has become a gathering place for locals, farmers and vendors to partake in a communal experience that reminds us of the importance — and joys — of healthy eating. "I think it's awesome," said Sandie Castaneda, who unexpectedly bumped into her grandmother at the market. "I like that it's just people coming together and supporting each other locally." Her grandmother, Amalia Montes de Oca, had just stepped out of the hairdresser when she discovered the market. She felt that it would provide her with access to vegetables, helping control her diabetes. The market currently is operated by the Lincoln Heights Benefits Association of Los Angeles every Wednesday at North Broadway and Daly Street from 3 to 7 p.m. Pauline Martinez, a USC employee who sponsored the initiative, explained the significance of such community space: "A farmers

market in Lincoln Heights means many different things to different people and yet they are curiously linked to the same value — to be the best we can be in a healthy environment, whether it's the entrepreneur selling fruits and vegetables, the artisan, the baker, the hot food vendor or the entertainer looking for an audience." Mario Maruffo, vice president of the Lincoln Heights Chamber of Commerce, added, "The partnership between USC and all this makes it possible for not only providing good food, but educating people about the importance of eating good food." Zul Surani, a member of the Lincoln Heights Farmers Market Committee and executive director of community partnerships for the USC Health Sciences Campus, added: "The university is proud to support collaborative efforts such as the farmers market and many others to make healthier choices easier choices." Moving forward, Martinez hopes that "people who live, work and travel through Lincoln Heights will continue to create and to contribute to a place that fills a great need in this community. We need healthy food choices and we need a place to connect, share ideas and gain knowledge on health and wellness."

Study: Country of origin factors in colorectal cancer risk

By Zen Vuong

In a first study of its kind, USC researchers have found that colorectal cancer risk in Californian Latinos varies widely depending on their country of origin. The study was published online Nov. 23 in *Cancer Causes & Control*. Using California Cancer Registry data, USC researchers examined the profiles of 36,133 Latinos and 174,710 whites diagnosed with colorectal cancer between 1995 and 2011. Specific findings include:

- Latinos from Mexico have the lowest chance of getting colorectal cancer when compared to other Latino subgroups.
- More Mexicans, Central and South Americans were diagnosed with colorectal cancer before age 50 versus other Latino subgroups.
- Among Latinos in California, Cuban colorectal cancer patients had the highest proportion of deaths, followed by Puerto Ricans.

USC Health Sciences
Public Relations and Marketing
2011 N Soto Street - SST-2830
Los Angeles, CA 90032

Non-Profit Organization
U.S. POSTAGE PAID
Industry CA
Permit 4029

HSC News

HSC News is published for the faculty, staff, students, volunteers and visitors in the University of Southern California's Health Sciences Campus community. It is produced by the Health Sciences Public Relations and Marketing staff. Permission to reprint articles is available upon request. No artwork may be reproduced without the creator's consent.



Editor: Melissa Masatani
Director, Internal Communications: Virginia Baca
Contributors: Andrea Aldana, Meg Aldrich, Amanda Busick, Ricardo Carrasco III, Louise Cobb, Mary Dacuma, Les Dunseith, Cristy Lytal, Douglas Morino, Sara Reeve, Sherri Snelling, Carol Sussman, Zen Vuong and L. Alexis Young

Phone: (323) 442-2830
Fax: (323) 442-2832
Email: hscnews@usc.edu
Web: hscnews.usc.edu | kecknet.usc.edu

Next Issue:
January 29