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Jonathan Russin finished his first marathon with former patient Kathy Nguyen and her husband, Robby.

Recovery team joins patient from aneurysm to marathon

By Mary Dacuma

A former patient at the USC Comprehensive Stroke and Cerebrovascular Center at Keck Medicine of USC ran the Los Angeles Marathon on Feb. 14, accompanied by the treatment team that saved her life.

Prior to her stroke, 41-year-old Kathy Nguyen had nine marathons under her belt. In March 2015, Nguyen collapsed at a family brunch and was taken via ambulance to a local emergency room. Her doctors determined she had serious bleeding in her brain, but could not determine the source of the bleed.

"The bleed was so severe that the neurosurgeon told my family I would be lucky to wake up," Nguyen recounted.

Nguyen was transferred to Keck Medical Center of USC for evaluation by their comprehensive cerebrovascular stroke team. A CAT scan helped William Mack, MD,

"There are not many patients that I can push to do circuit training after a stroke. But associate professor of neurological surgery, find the aneurysm causing the bleed. He quickly recognized the complexity of the problem.

"There was a ruptured aneurysm that involved the entire left vertebral artery, including the posterior inferior cerebellar artery (PICA), which provides blood to part of the patient's brainstem," said Jonathan Russin, MD, associate surgical director at the USC Neurorestoration Center. "Cutting off the blood supply to the artery would also cut off blood to the brainstem, causing brain damage or even death. "

Russin performed a PICA-PICA bypass, which involves suturing the right and left PICAs together to ensure proper blood flow to the brainstem while preventing additional bleeding from the aneurysm. The USC Stroke Center is one of a handful in the country that can perform this rare procedure. Immediately following the bypass, Mack and his team blocked the vertebral artery and the aneurysm through endovascular coiling.

On Friday, March 13, Nguyen woke up. "Friday the 13th has always been my lucky day," she said. "My twins were born on that day."

Neuroscientist, author hold talk on Alzheimer's

By Alison Stateman

Alzheimer's disease not only takes a profound physical toll but has a huge emotional and financial impact on society as well, two experts on the disease told a USC crowd.

"Today in the United States, we spend \$250 billion to \$260 billion dollars a year to take care of Alzheimer's patients. By 2050, we will spend over \$1 trillion a year," USC neuroscientist Arthur Toga, PhD, told the audience at Something's Not Right With Alice: Understanding Alzheimer's, a Visions & Voices event Feb. 4 at Bovard Auditorium.

Toga, director of the USC Mark and Mary Stevens Neuroimaging and Informatics Institute, was joined by Lisa Genova, PhD, author of best-selling novel *Still Alice*. Moderated by NPR correspondent Ina Jaffe, the talk between Genova and Toga touched on the many impacts of the disease.

"Those people who are over 65, one in nine will get Alzheimer's disease. Those who are over 85, one in three will get Alzheimer's disease," said Toga, who has created some of the largest databases and data mining tools used to support global efforts against Alzheimer's and other neurologically degenerative diseases.

"This is the grandest challenge we have in neu-

See ALZHEIMER'S, page 6



Read about the Keck School's diversity efforts in this issue

The Keck School of Medicine of USC is focused on promoting diversity and inclusion among its students, faculty and in the surrounding community. Under Dean Carmen A. Puliafito, MD, MBA, the Keck School has developed several premier programs that reach out to underrepresented students, offering support and guidance as the students pursue health degrees. Read about how the new associate dean for faculty diversity is crafting a five-year plan for the Keck School; see how student groups address cultural issues affecting underrepresented students; and celebrate an award-winning pipeline program that aims to introduce health care careers to local high school students. All of this and more, on pages 3-4.

her spirit inspired me to

push myself and join her

for her comeback race."

— Cherise Lathan, PT, DPT

Nguyen made a remarkable recovery with strong support from her treatment team.

"Kathy's motivation and commitment to physical fitness enabled her to engage in high-intensity activities soon after her surgery," said Cherise Lathan, PT, DPT,

See MARATHON, page 2



Attendees listen to a speaker during the Women and Children's Health Symposium, held Feb. 6 on the Health Sciences Campus.

Hundreds learn about women's, children's health at symposium

With events ranging from refugee health lectures to hands-on vaginal delivery workshops, more than 200 health professions students and over 45 health care providers participated at the annual Women and Children's Health Symposium with a focus on medical advocacy.

Held Feb. 6 on the Health Sciences Campus, the event was organized by the OB/GYN and Pediatrics student interest groups at the Keck School of Medicine of USC and was sponsored by the Graduate Student Government, Associated Students of the School of Medicine, American Medical Association and the Dean's Office for Events.

Attendees included medical students from the Keck School and nearby medical schools, as well as pharmacy, physician's assistant, occupational therapy and physical therapy students.

Finding her calling: a love for medicine

By Amanda Busick

Pamela Schaff, MD, was 17 years old when she had a revelation. Schaff, now associate dean for curriculum at the Keck School, was just a teenager visiting her mother, who was recovering from minor surgery.

"I was walking down the hospital corridor to go visit her, and I got my calling; I just knew that I was going to be a doctor," she said. "It sounds corny, but that's what happened.'

In college, she was a pre-med English literature major and, after earning her bachelor's degree, she was off to Mount Sinai School of Medicine. Training at Children's Hospital Los Angeles followed, as well as more than a decade in private practice.

She initially joined the Keck School in 1986 as a voluntary faculty member in the Introduction to Clinical Medicine (ICM) program.

"I fell in love with the process (of ICM)," Schaff said, "shepherding

students through their early clinical skills, what it means to become a doctor - those first steps of professional identity formation.'

Her solid grounding in literature and humanities steered her to the Humanities, Ethics, Art, and Law (HEAL) program, which she currently directs. The program embraces narrative medicine, a practice that concentrates on narrative competence, enabling students to interpret and act on the stories that their patients share. This ability fosters empathy in medical students, benefiting their future patients and enhancing their own professional satisfaction.

Schaff also has been an integral part of USC Visions and Voices, the university-wide program that brings renowned artists and distinguished speakers to campus.

She has received the Excellence in Teaching Award in 1998, 2002 and 2005; KSOM's Master Teacher Award and the USC-Mellon Mentoring Award in 2008; and USC's Remarkable Woman Award in 2010.

Since her appointment as associate dean for curriculum in 2012, Schaff has overseen the four-year educational program for all Keck School medical students. She calls the job challenging but rewarding.

"We strive to teach our medical students to be lifelong learners," she said, explaining that their knowledge base also must include grounding in the humanities. "We want to make sure our students practice with compassionate brilliance."

Even with all of this work with students, Schaff still finds time to see patients in the family practice clinic at Keck Medicine of USC.

"One of the most rewarding things is the time I spend in clinic seeing patients," she said, adding that her teaching and work in curriculum enrich her practice. "When I'm with



Pamela Schaff

medical students, I'm reminded of what called me to medicine, of the incredible privilege it is to care for children and their families. And I'm a better doctor in the clinic because I spend so much time being inspired by my students and colleagues as we 'grow and develop' future doctors."

Congresswoman receives Alzheimer advocacy award

By Amanda Busick

Nongresswoman Linda Sánchez was recognized for her work as an advocate for Alzheimer's research and care at the Feb. 12 conference, The Many Faces of Dementia, in downtown Los Angeles. The Pioneer Award was presented by the Alzheimer Disease Research Center.

"This issue is very personal to me," she said in a prerecorded speech that was shown during the conference. "My father, like millions of others, suffers from this tragic disease. It's difficult for me to talk about, but I share his diagnosis because I know I'm not alone."

Sánchez is on the Bipartisan Congressional Task Force on Alzheimer's disease and was a co-sponsor of the National Alzheimer's Project Act, which was signed into law by President Obama in 2011. The law ensures that ethnic and racial populations who are at higher risk from Alzheimer's be included in the government's efforts on research, care, and home and community-based programs. More recently, Sanchez supported a government funding measure that increased funding for Alzheimer's research by \$350 million.

The Congresswoman has been a supporter of the NIH-supported USC Alzheimer Disease Research Center



Linda Sánchez

Institute, the Alzheimer's Therapeutic Research Institute and the Zilkha Neurogenetic Institute can all kick their research into even higher gear, positioning USC to become an Alzheimer's research powerhouse right here in our backyard."

Helena Chui, MD, chair of the Department of Neurology and a featured speaker at the conference, said that this support is integral to the research and patient care challenges in combating this disease.

"The \$350 million is the first time we've seen a significant increase in funding," Chui said. "It's very important because there are 5 million Americans with Alzheimer's now and another 5 million will be added every 10 years."

Calendar of Events

Friday, Feb. 26

Noon. USC Institute for Global Health Lecture. "Mexico's Feasible Path Toward Reducing Premature Mortality," Jaime Sepulveda, MD, DSc, MPH, UCSF. SSB 115/116. Info: Larissa Puro, (323) 442-7233, puro@usc.edu, http://globalhealth.usc.edu

Monday, Feb. 29

Noon. KSOM Research Seminar Series Seminar. "Cellular Tools for Virus Warfare," Benjamin tenOever, PhD, Mount Sinai School of Medicine. Aresty Auditorium. Info: Mary Jane Chua, maryjane.chua@med.usc.edu

Monday-Tuesday, Feb. 29-March 1

7-11 a.m. Feb. 29; 7 a.m.-8 p.m. March 1. Office of Safety & Emergency Management Lecture. "Active Shooter - Remaining Prepared in a Run, Hide, Fight World," Robert C. Vance III. Verdugo Hills Hospital Council Room B. Info: Robert Vance III, (323) 442-9915, robert.vance@med.usc.edu. Lecture and hands-on exercise repeated hourly.

Monday-Friday, Feb. 29-March 4

6:30 a.m.-12:35 p.m. Continuing Medical Education 44th Annual USC Diagnostic and Therapeutic Skills in Internal Medicine Conference. USC course director Ron Ben-Ari, MD. Hapuna Beach Prince and Mauna Kea, Big Island Hawaii. Info: Anika Bobb, (323) 442-2547, anika.bobb@med.usc.edu, http://usc.edu/cme

Tuesday, March 1

Ophthalmology Grand Rounds Ananth Sastry, MD. HC4 Conference Room, 3rd Floor. Info: Tyaisha Christopher, (323) 409-5233, Tyaisha.Christopher@med.usc.edu, http://usceye.org

Seminar. "Role of Exosomic MicroRNAs in the Biology of the Tumor Microenvironment," Muller Fabri, MD, PhD. Aresty Auditorium. Info: Mary Jane Chua, maryjane.chua@med.usc.edu

Tuesday, March 8

8:30 a.m.-4:30 p.m. Department of Stem Cell Biology and Regenerative Medicine; Eli and Edythe Broad Center for Regenerative Medicine and Stem Cell Research at USC. Symposium, Junior Faculty Candidate Mini-symposium, Eli and Edythe Broad CIRM Center Auditorium. Info: Cristy Lytal, lytal@med.usc.edu, http://stemcell.usc.edu

Friday, March 11

8 a.m.-4 p.m. Department of Medicine: Hastings Center for Pulmonary Research Symposium. "The Pulmonary Challenge: Innovations in lung development, stem cells and regeneration," Aresty Auditorium. Info: Mariana Gonzalez, hcpr@med.usc.edu, RSVP: https://hcpr.eventbrite.com

Saturday, March 12

6 p.m. Keck School of Medicine of USC. "Keck Scholarship Gala," Town and Gown, University Park Campus, Los Angeles. Info and RSVP: http://usc.edu/ESVP Code: KeckGala

Saturday, March 19

7:30 a.m.-5 p.m. USC Tina and Rick Head & Neck Surgery, Continuing Medical Education Event. "Breakthroughs in Clinical Otolaryngology: Pragmatic, Cost-Effective Approaches," Huntington Library, San Marino. Info: Ashley Foster, (323) 442-9918, Ashley.Foster@med.usc.edu

for many years. Sánchez pointed out that this funding will directly affect the Keck School.

"With the recent increases in federal funding for Alzheimer's research, programs like the new Stephens Neuroimaging and Informatics

For more information about the USC Alzheimer Disease Research Center, go to www.usc.edu/memory.

MARATHON: Nguyen's contagious spirit motivated team to join race

Continued from page 1

physical therapist at Keck Medical Center. "There are not many patients that I can push to do circuit training after a stroke. But her spirit inspired me to push myself and join her for her comeback race."

Nguyen recruited Lathan, Russin, Joseph Hendrix, physician assistant at the neurosciences clinic, Valerie Sanchez, administrative assistant, and Chris Sickels, development officer to run by her side. It was the first marathon for all of them.

Nguyen also raised more than \$4,800 for the USC Stroke Center.

"In addition to raising awareness for brain aneurysm research, I wanted thank my treatment team, especially all the nurses at 7 South ICU. I wouldn't be here if it weren't for them."

Wednesday, March 2

Noon. The Saban Research Institute Seminar. "Gene Environment Interaction in the Pathogenesis of Pediatric NAFLD," Nicola Santoro, MD, PhD, Yale University School of Medicine. Auditorium, Saban Research Building, 4661 Sunset Blvd. Parking is available at the main hospital garage. Info: Ritu Gill, (323) 361-8715, tecpad@chla.usc.edu, http://chla.org/tecpad

Monday, March 7

Noon. KSOM Research Seminar Series

Monday, March 28

Noon. Department of Medical Education Seminar. "Faculty Development Seminar: Engaging Learners in a Large Group,' Dixie Fisher, PhD. KAM 206. Info and RSVP: Cris Argosino, (323) 442-2746, argosino@usc.edu, http://bit.ly/1Oijrt9

Thursday, March 31

4 p.m. Visions and Voices Discussion. "Music and Medicine: Experiments and Explorations," Berislav Zlokovic, director, Zilkha Neurogenetic Institute. Mayer Auditorium. Info: http://visionsandvoices. usc.edu, RSVP on the website beginning at 9 a.m. March 8

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-ofevents. 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.

Diversity has deep roots at Keck School

By Amanda Busick

B uilding and supporting a diverse campus community is a cornerstone principle of the Keck School of Medicine of USC. The school has a multi-pronged plan to support that principle — building a pipeline of interested and qualified students, supporting those students when they come to the Keck School, and attracting and retaining an outstanding and diverse faculty.

The school's Office of Diversity and Inclusion promotes inclusion among aspiring medical professionals with programs like Med-COR, Bridging the Gaps, the PA Pipeline Program and many student groups.

The Keck School continues to strive to be the most diverse, most inclusive medical school possible, recently establishing Dean Carmen A. Puliafito's Diversity Cabinet, which gathers staff and faculty to address the Keck School's needs and acknowledge its accomplishments in diversity.

Not only is the Office of Diversity and Inclusion one of the medical school's oldest programs, it began nearly 50 years ago in response to student requests to highlight the issue of diversity on campus.

"In 1968, five white, male medical students went to the dean and said that they were tired of going to school with people who looked like them," Assistant Dean of Diversity Althea Alexander said. "They said, 'we are in the heart of the Spanishspeaking community, not far from the black and Asian communities, and we have a small Native American community. We need to be doing more.' " Because, they concluded, it was the right thing to do.

The Keck School has graduated 756 black and Latino physicians since 1968, with another 31 to be added this year. The Office of Diversity and Inclusion not only is responsible to black and Latino students, but also Asian and Native American aspiring health care professionals and LGBT students.

This is one of many ways the Keck School continues to encourage its very important underrepresented student population.

Groups help students feel at home on campus

By Hope Hamashige

Conducting hepatitis B screenings at local health fairs is one way that members of the Keck School of Medicine's Asian Pacific American Medical Student Association (APAMSA) give back. The students join forces with the Asian Pacific Liver Center to check for the disease, which touches the lives of Asians and Asian-Americans disproportionately.

"We find that APAMSA provides great opportunities for us to actively help and give back to the community through mentorship and networking," said Laurie Song, co-chair of the Keck School's APAMSA chapter. "This allows for students in the club to feel at home on campus and makes us more well-rounded as medical students."

APAMSA is one of several diverse student organizations at the Keck School, which has long felt that having such groups was a critical piece of its long-standing effort to enroll and retain a diverse student body.

"Diversity has always been part of the intrinsic fabric of the Keck School of Medicine of USC; it is a vital core of our DNA and that of the entire Trojan family," said Henri Ford, MD, MHA, vice dean of medical education.

Many of the groups have, as part of their mission, a commitment to ensuring diversity among future generations of medical students and doctors. For example, members of the Student National Medical Association, an organization for medical students of color, make monthly visits to the nearby Tom Bradley Elementary School to give a science lesson, while the Latino Medical Student Association hosted a mentorship day in the fall for students from nearby community colleges, offering guidance about the application process to aspiring medical students.

And in addition to providing a source of fun and community, these groups provide a forum to tackle serious issues facing both minority students and the populations of patients they represent. The Keck School's chapter of MedGLO, a national organization of gay, lesbian, bisexual and transgender medical students, organized a lunch talk on gender confirmation surgery and hosted a workshop for first-year students about talking to their patients about sexual orientation. "Being part of MedGLO has provided me with the opportunity to work to enhance awareness and understanding regarding the way in which diverse cultural, psychosocial, economic, political, and historical factors come together to impact LGBTQ health," said Justin Trop, a co-chair of the Keck School's MedGLO chapter.





High school students interact with volunteers from the Primary Care Physician Assistant Program during one of the PA program's monthly Pipeline Program events. The teenagers learn about a range of health care-related topics, including neurology, anatomy, nutrition and first aid.

PA program recognized for community outreach

W Amanda Rucia

The teenagers who participate in the program are almost all from underserved schools in the area and are considering careers in a variety of medical positions. Topics at these events range from neurology, anatomy and physiology to nutrition and basic first aid, and the students are introduced to a wide range of health care careers.



Keck Bhangra student group members pose before a performance at APAMSA Diwali Day 2014.

by Amanua Busick

Once a month, up to 60 local high school students join volunteers from the Primary Care Physician Assistant (PA) Program at Keck School of Medicine of USC for the Pipeline Program, which teaches these students knowledge and skills that could transform their future careers.

This program was one of the reasons cited by the Physician Assistant Education Association Forum for recognizing the Keck School's program with the Excellence Through Diversity Award.

The Pipeline Program was established almost four years ago under the guidance of Maria G. Maldonado, MPH, MPAP, PA-C, faculty instructor of clinical medicine and pipeline recruitment director. The program is one of the ways the Keck School reaches out to the community, sparking interest in medical fields among a diverse base of qualified students.

Maldonado is quick to point out that she's not the only influence on the program.

"It's a team effort on every level, and that's one of the things that really makes this program successful," she said. "I really think that's one of the strong foundational pieces for this to continue to be in action and to be sustainable." The enthusiasm for the program and the subject matter is clear when Mariah Ginez, a 17-year-old senior from Montebello High School, shares her experiences.

"I love this program," she said with a smile. "I never knew about PAs before I came and now it's pretty much the career path I am going to take."

Maldonado's vision for the future includes expanding the program to include parental support workshops, information about financial aid options and academic support once the students make it to graduate school.

"There are unique barriers and challenges that extend beyond the high school and college years to graduate school," Maldonado said. "So that's where we need to help any student who may be in academic risk.



Two students from the Keck School of Medicine of USC served as members of the executive committee for the second annual Southern California LGBTQ Health Conference, held Feb. 20.

Bringing patient care issues out of the closet

By John Hobbs

For patients in the lesbian, gay, bisexual and transgender (LGBT) community, a routine check-up can bring up topics out of the norm for practicing physicians. As a result, students from the Keck School of Medicine of USC are taking strides to improve health care workers' understanding of the issues.

The students are ahead of us on this and driving change," acknowledged Suzanne Palmer, MD, professor of clinical radiology and medicine and president of the Keck School of Medicine of USC Faculty Council. "They were instrumental in establishing LGBT Thrive, a group on USC's Health Sciences Campus that includes staff, students and faculty from across the hospitals and medical school, that is helping to integrate LGBT-friendly policies into education and clinical practice."

Recently, Keck School administrators approved a lecture on LGBT health thanks to the advocacy work of MedGLO, an LGBT organization with more than 70 members at the Keck School.

Two Keck School students also joined aspiring health care professionals from local universities to organize the second annual Southern California LGBT Health Conference

The event, which was held Feb. 20 at the University of California, Irvine, was intended to foster conversations about LGBT health and wellness in the context of individual lives and stories. The nearly 200 attendees included currently practicing and future health care professionals as well as LGBT community members.

As members of the conference's executive committee, second-year Keck School students Justin Trop and Jennifer Franks said they would like to see LGBTQ patient care issues better represented in health care curricula. LGBT cultural literacy takes on a new level of importance with a doctor, who focuses on the entire patient.

"If your patient is a trans man in need of a pap smear or is intersex and has retained testes, if you don't ask your patient about it, you will never know, and they could be in danger," Trop said.



By Melissa Masatani

s the chief diversity officer As the chief diversity onice for the American Association of Medical Colleges, Marc Nivet has a message you'd never expect: Diversity is not good.

"There is nothing inherently good about diversity, there's nothing magical about diversity," Nivet said during a Feb. 17 lecture at Mayer Auditorium. "What is required to make diversity useful and positive and good is this concept of inclusion. Inclusion is the fuel that animates the diversity. It is what makes use of all of our different experiences, attributes, talents and inherent diverse characteristics."

Nivet, EdD, MBA, was on the Health Sciences campus to present "Diversity 3.0: From Fairness to Excellence," a discussion about the direction of diversity on medical campuses across the country presented by the Office of Educational Affairs and Office of Diversity and Inclusion.

"We have been thrilled to have him with us (on campus), where he has met with a number of us, including members of the Dean's Diversity Cabinet as well as some of our student leaders." said Educational Affairs Vice Dean Henri Ford, MD, MHA. "The message coming from him has been quite insightful and should help Keck on its path to promote diversity and also allow us to embrace what has been the fabric of USC: the importance of diversity through all of the various facul-

ties throughout the university."

Diversity just means differences, Nivet said, and administrators must focus on how to make sure students and faculty flourish in a diverse campus community.

"In the simple-minded way of thinking about (diversity), what we do is we count people," Nivet said. "But we don't make sure people count. We need to make sure that people are bringing their full selves to the institution and are being harnessed to make more of the institution."

First-year student Nana Bonsu agreed.

"I think the idea of inclusion is important because, just because you have these numbers of minority people, it doesn't necessarily mean that vou're doing something," he said. "It's a step, but if you're not actually doing something with the minorities to make sure they feel included, then I think it's futile."

Nivet also emphasized that diversity is not just an important conversation — it must be an urgent priority, which resonated with several of the students in attendance.

"The school knows diversity is important," second-year student Vanessa Arientyl said. "We're talking about diversity, but how do we go about it? Right now, diversity is just important, but I think people recognize that it is becoming urgent. We have the potential to be frontrunners in this, so why not?"





The Southern California LGBT Health Conference was intended to foster conversations about LGBT health and wellness in the context of individual lives and stories.

Marc Nivet, chief diversity officer of the American Association of Medical Colleges, speaks Feb. 17 at the Keck School of Medicine of USC.

Faculty diversity among administration's priorities

By Amanda Busick

 ${
m E}$ ven the most diverse student body can feel alienated and underrepresented if there isn't a diverse faculty to match it. The Keck School of Medicine of USC has a proud heritage of diversity and is taking steps to further develop and maintain a diverse faculty and staff.

Jeffrey Upperman, MD, associate dean for faculty diversity, was appointed to this position in November of 2015. He is making sure that this important task is something he and his team are tackling in a thoughtful way.

Upperman's plans include a "listening tour" of various departments and teams at the school, getting different perspectives on the issues and gathering information on what the current climate offers staff and students.

He is well aware of the national attention this very important issue has received.

'Obviously major universities are taking this fairly seriously," he said, "and I think as we begin to craft what our five-year strategy is for the Keck School, we need to make sure that we have all of the appropriate information so that we make a strong investment in our future."

Upperman is a member of Dean Carmen A. Puliafito's Diversity Cabinet, one of the ways the Keck School is focused on enhancing recruitment and retention of students, faculty, residents and staff.

The community surrounding the Keck School always has been an important part of the makeup of the institution as well. This is something that Upperman wants to continue to foster.

"As you are trying to figure things out within various communities that are ethnically and socioeconomically diverse, it's important to reflect those communities," he said.

"I think that the Keck School has a long history of being part of the community and this is an ongoing extension of really trying to step it up and continue to do great things."

Students tackle global health crises

By Larissa Puro

For the fifth year, nearly 100 USC students from 10 schools faced current-day issues of global health during the USC Global Health Case Competition on Feb. 11.

Teams were mock consultants "hired" by the American Cancer Society and had a week to identify and implement global programs to foster healthy communities in lower-income countries.

The annual cross-campus challenge, which began in 2012, is coordinated by the USC Institute for Global Health and a partnering organization — this year, it was American Cancer Society.

Previous competitions have featured partnerships with organizations including TOMS, the World Health Organization, Centers for Disease Control and International Medical Corps.

Master of Public Health candidates Danielle Pappas, Evan Pye and Jessica Frankeberger; psychology undergraduate Jennifer Bailey and dual-degree pharmacy and PharmD/ MPH student Amy Nham are members of the winning team.

They will represent USC at the International Emory University Global Health Case Competition in Atlanta this April.

By contending for first place with their peers, the students learned to collaborate with others under pressure. Instead of handpicking a team to go to Emory University — which some universities, in fact, do — USC leaves it up to the students, which motivates them to think creatively and competitively.

On competition day, students presented to judges comprising USC faculty and American Cancer Society representatives. Each team had to analyze research related to health promotion and cancer prevention in low- and middle-income countries and develop a five-year sustainable, realistically financed strategic plan to further cancer prevention through healthy environments and lifestyles.

Teams included students from the Marshall School of Business, Viterbi School of Engineering, Keck School of Medicine, Dornsife College of Letters, Arts and Sciences, Annenberg School for Communication, Price School of Public Policy, School of Social Work, Leventhal School of Accounting, School of Pharmacy and the Jimmy Iovine and Andre Young Academy.



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Members of the winning team in the fifth annual USC Global Health Case Competition are, from left, Danielle Pappas, Amy Nham, Evan Pye and Jessica Frankeberger. Not pictured is Jennifer Bailey.

Rosie Henson, American Cancer Society Vice President for Prevention and Early Detection — and one of the day's judges — treated participants to a lecture midway through the day as part of the USC Global Health Lecture Series. She addressed the movement to include cancer in discussions of one of the most pervasive challenges facing us today: improving Americans' health and well being. The lecture will be available to watch online.

The students will receive guidance from global health faculty before they compete at Emory University on April 8-9 for a chance to win \$6,000.



Ismael Fernández-Hernández is one of 11 Mexican postdoctoral fellows at USC.

Mexican researcher tapped for fellowship at stem cell lab

By Cristy Lytal

We can learn a lot from fly brains, according to Ismael Fernández-Hernández, PhD, a postdoctoral fellow in the USC Stem Cell laboratory of Michael Bonaguidi, PhD.

Fernández-Hernández is an accomplished researcher who showed that adult fruit flies have the potential for replenishing brain cells lost to disease, injury or aging. He is also one of 11 new Mexican postdoctoral fellows at USC jointly funded by the university and the Consejo Nacional de Ciencia y Tecnología (CONACYT) - Mexico's equivalent of the National Science Foundation. "This arrangement between the USC and CONACYT is great, because it allows Mexican researchers to come here to a distinguished university with state-of-the-art facilities to increase their knowledge and experience, which eventually benefits people in both countries," he said. "This has been a very important opportunity for me." As a USC-CONACYT Provost Fellow, Fernández-Hernández will receive funding for up to two years of postdoctoral research at the Eli and Edythe Broad Center for Regenerative Medicine and Stem Cell Research at USC, part of the Keck School of Medicine of USC. After his two-year postdoctoral fellowship at USC, Fernández-Hernández and his wife are open to opportunities anywhere in the world. Eventually, however, he hopes to start his own laboratory in Mexico, while maintaining collaborations with his USC colleagues.

He began using fruit flies to study cancer during his master's degree at

Urology leaders gather for inaugural conference

More than 150 medical professionals watched simultaneous open and robotic radical cystectomies recently, as a group of global leaders in the urology field gathered for an inaugural conference at the Keck School of Medicine of USC.

The First Annual Conference: Practical Urology, held Feb. 4-6 at the Health Sciences Campus, offered a state-of-the-art showcase of practices in urology from national and international leaders in the fields of urology, oncology and others. Organized by Inderbir Gill, MD, the founding executive director of the USC Institute of Urology and chairman and professor, Catherine and Joseph Aresty Department of Urology, the course included hands-on labs, live surgeries, interactive discussions and more.

The next conference will be held Feb. 2-4, 2017.



the Spanish National Cancer Research Centre (CNIO) and the Autonomous University of Madrid in Spain. Then his PhD work at the University of Bern in Switzerland showed, for the first time, that fruit flies have a remarkable regenerative capacity to produce new neurons after brain injury. He continued to work with fruit flies while studying brain tumors during his first postdoc at the Institute for Research in Biomedicine (IRB) in Barcelona, Spain.

In the Bonaguidi Lab, Fernández-Hernández is using these surging swarms of flies to find genetic factors and test drug-like compounds that may help the brain counteract degeneration from disease, aging or injury.

"Flies are, genetically speaking, quite related to humans," Fernández-Hernández said. "Sixty percent of the genes causing diseases in humans are shared with flies. Along with several technical advantages, that's why it is a very suitable model organism to study the genetic causes of diseases."



Attendees view a display of a Da Vinci Xi Surgical Systems robot.

Industry partnership to help research in immune diseases

By Zen Vuong

Investigators at Keck Medicine of USC are tackling immunemediated diseases in a whole new way with the creation of a joint postdoctoral program.

Omid Akbari, PhD, a professor in the Department of Molecular Microbiology and Immunology at the Keck School of Medicine of USC, said a combined postdoctoral effort with Janssen Research & Development, a unit of Johnson & Johnson, will give his lab's researchers the ability to practice translational research that could flow from bench to bedside. Akbari will be a principal investigator of the new Janssen Immunology Postdoctoral Program.

USC has a three-year contract with Janssen. During that time, USC will own 50 percent of any intellectual property that results from the collaborative postdoctoral program, Akbari said.

"It is very uncommon for a company to give intellectual property rights away," Akbari said.

"This is a novel approach to finding solutions for patients' maladies."

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:



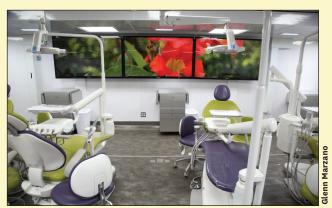
Stand of Iris by Lisa Chakrabarti

USC Norris to mark second anniversary of Survivor Art Series

For two years, cancer survivors have been able to showcase their artwork in a rotating show at the Jennifer Diamond Cancer Resource Library in the USC Norris Comprehensive Cancer Center. The library will host a reception to mark the second anniversary of the ongoing program at 2 p.m. March 9, featuring its eighth cancer survivor/artist. Lisa Chakrabarti will talk about her life as an artist, her experience as a patient at USC Norris and how her cancer diagnosis has informed her creative process. "Another reason to celebrate is that all seven of our previous artists are still survivors," said Mary Aalto, volunteer library coordinator for the Jennifer Diamond Cancer Resource Library. Refreshments will be served, no RSVP is necessary. The library is located in the Harlyne J. Norris Research Tower, G501. For more information, call (323) 442-7805.

Residential traffic reduces child's genetic protection from asthma

Too much residential traffic removes the protective effect a specific gene has on lowering asthma risk, according to a new USC study. Children could have zero, one or two copies of a common gene variant. "Environmental exposures such as traffic-related air pollution can trigger lung inflammation, but the effects depend on genetic background," said Frank Gilliland, MD, PhD, MPH, senior author, preventive medicine professor and director of the division of environmental health at the Keck School of Medicine of USC. "Some people have a genetic background that reduces their risk for lung inflammation, but if they are highly exposed, then that protection goes away." The study, published in the journal PLOS One, examined exhaled nitric oxide levels in 2,457 white and Hispanic children in Southern California. Exhaled nitric oxide is a biomarker of airway inflammation; higher levels of it increase a child's risk of developing asthma. Children with a common variation of "NOS2," the primary gene that produces nitric oxide in airways, tend to have lungs that are less inflamed. Thus, they are less likely to develop asthma. — Zen Vuong





HELPING RUNNERS: Volunteers from Keck Medical Center of USC and Los Angeles County + USC Medical Center pose before aiding runners on Feb. 14 at the Skechers Performance Los Angeles Marathon finish line.



USC Clinical Trials Office announces new director

A fter assuming oversight of the USC Clinical Trials Office (CTO) in January, the Keck School of Medicine of USC has announced the appointment of Melissa Archer, JD, as the new director of the CTO. Archer, who has a background in law, was identified through a comprehensive national search and comes to USC from leadership positions in clinical trials operations in the private sector and academia.

"I feel very fortunate to have the opportunity to work with the talented and diverse faculty and staff in the USC research community," Archer stated. "I look forward to bringing my experience to collaborate, and to support the school's efforts to expand our clinical trial programs." Archer will lead the CTO through a transition that is designed to enhance the efficiency, user-friendliness and transparency of services available to support clinical trials at USC. The transition coincides with other major advances in USC's environment for clinical research, including a new clinical trials management system, a clinical data warehouse for research, and a one-stop Clinical Research Support Office to assist research teams in the design and conduct of clinical studies.

ALZHEIMER'S

roscience. If we don't solve this problem, it will not only bankrupt our families financially and emotionally, it will bankrupt this country."

Genova, a Harvard-trained neuroscientist who was inspired to write *Still Alice* — her first novel — after her grandmother was diagnosed with Alzheimer's, sees her work as a vehicle to spread understanding and galvanize action toward a once rarely discussed condition.

"I always start with the science, but my job is to write a compelling, human story that brings compassionate understanding," she said about her fiction, which is dedicated to exploring the human dimension of neurological diseases.

While there is still no cure for Alzheimer's, both Toga and Genova say the situation is moving in a positive direction. For instance, the public conversation created by increased awareness of the disease — helped in part through the successful film adaptation of Still Alice, for which Julianne Moore won an Oscar in 2015 as an early-onset Alzheimer's sufferer — is leading to greater investments into a cure.

"The progression of knowledge of Alzheimer's disease has been impressive in the last 25 years and continues to grow in a very accelerated way," Toga said. "There is great hope, great excitement and great enthusiasm among scientists to push forward with this disease."

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Vibrant visuals accompany soothing music in the Herman Ostrow School of Dentistry of USC's new mobile dental clinic.

Dentistry school unveils world's largest mobile dental clinic

At 48 FEET LONG — JUST FIVE FEET SHY of a standard semi trailer — and 22 feet wide, it's the largest mobile dental clinic in the world. And the Herman Ostrow School of Dentistry of USC celebrated the opening of the colossal clinic — the crown jewel in its mobile fleet — with a ribbon-cutting ceremony and walk-through tours in February at the Westminster Presbyterian Church in Pasadena. More than 85 USC dental students attended the event, which commemorated the clinic's opening at its first stop, where Ostrow faculty, staff and students provided dental treatment to 120 disadvantaged children. "It is our hope that these community experiences engender in our students a lasting commitment to give back to the community," said Avishai Sadan, DMD, dean of the dental school. — John Hobbs

HSC News

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