



Keck School Dean Carmen Puliafito hits the ground running

New Keck School Dean Carmen Puliafito attends his first USC football game on Sept. 1, accompanied by Minor Anderson, CEO of USC Care Medical Group, Inc. Puliafito's deanship began Nov. 1.

New dean sets ambitious schedule of meetings with constituents

Beginning his tenure as dean of the Keck School of Medicine this month, Carmen A. Puliafito plans to meet with a wide variety of Keck constituents. He also has established an online presence to introduce himself to the campus community.

During his first 100 days, Puliafito has committed to an ambitious schedule of informal meetings. These include a series of morning and late afternoon receptions to meet Keck faculty, "Conversations over Coffee" with Keck staff, lunch with student leaders, an evening party on the quad for all Keck medical students, and a reception with alumni leaders of the Salerno Collegium, among other activities.

"It is important for me to meet as many faculty, staff, students, residents, alumni, donors and friends as possible as soon as possible so that I may get a sense of what is important to us collectively," he said. "We will need a shared vision for the Keck School, a shared sense of optimism about the opportunities that lie ahead of us. There is much to celebrate."

Also, the Keck School of Medicine has updated the dean's Web pages with a video message from Puliafito, as well as a biography and news items of interest to the Keck community. To navigate to the site, visit www.usc.edu/keck and click, "Read more."

When can you meet Dean Puliafito?

Following are currently planned activities. Please note that reservations to all events will be limited to maximize the opportunity for conversation with Dean Carmen Puliafito.

- **Keck School faculty are invited** to Meet the Dean at one of several receptions at the Edmondson Faculty Center: Nov. 8 (3-4:30 p.m.), Nov. 13 (4-6 p.m.), Nov. 19 (4-6 p.m.) and Nov. 27 (7:30-9:30 a.m.).

- **Keck School staff are invited** to meet the dean at one in a series of "Conversations over Coffee" in the Keith Administration Building, Room 505. Additional dates will be posted as soon as they are confirmed. Each session will take place 9-10 a.m. Nov. 21, Nov. 30 and Dec. 11.

- **All Keck medical students are invited** to save the date of Dec. 6, to Meet the Dean at a late afternoon party on the quad with catering by In-N-Out Burger. More details to be posted at a later date.

- **Salerno Collegium Board members are invited** to Meet the Dean at a reception scheduled for Nov. 29, 6-8 p.m., at the Edmondson Faculty Club. For more information, e-mail Michael Mayne at mmayne@usc.edu.

To view the complete schedule of events, go to www.usc.edu/keck, click on "See Dean's Welcome Message" and then click on "Meet The Dean Activities" from links.

Please RSVP as needed for your choice of date by clicking on the link in the calendar entry on the Meet The Dean Activities page.

Daily commute proves to be key mode of smog exposure

By Meghan Lewit

The daily commute may be taking more of a toll than people realize. A new study by USC researchers and the California Air Resources Board found that up to half of Los Angeles residents' total exposure to harmful air pollutants occurs while people are traveling in their vehicles.

Although the average Los Angeles driver spends about six percent (1.5 hours) of his or her day on the road, that period of time accounts for 33 to 45 percent of total exposure to diesel and ultrafine particles (UFP), according to the study published this month in the journal *Atmospheric Environment* and available online. On freeways, diesel-fueled trucks are the source of the highest concentrations of harmful pollutants.

"If you have otherwise healthy habits and don't smoke, driving to work is probably the most unhealthy part of your day," said Scott Fruin, assistant professor of environmental health at the Keck School of Medicine. "Urban dwellers with long commutes are probably getting most of their UFP exposure while driving."

High air exchange rates that occur when a vehicle is moving make roadways a major source of exposure. Ultrafine particles are of particular concern because, unlike larger particles, they can penetrate cell walls and disperse throughout the body, Fruin said. Particulate matter has been linked to cardiovascular disease, but the ultrafine fraction on roadways appears to be more toxic than larger sizes.

Researchers measured exposure by outfitting an electric vehicle with nine, fast-response air pollution instruments. A video recorded surrounding traffic and driving conditions on freeways and arterial roads throughout the Los Angeles region. Measurements were collected during a three-month period from February to April 2003, and four typical days were selected for a second-by-second video and statistical analysis.

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BIOTECH CONFERENCE—The USC Body Computing Conference on Oct. 26 brought together thought leaders from the fields of biotechnology, pharmaceuticals, entertainment, investment banking and government organizations to educate and discuss long-term effects of networked physiologic monitoring as it takes its place in the advancement of the medical community. Participants included (from left) Dan Schultz from the FDA, Doug Rasor from Texas Instruments and David Cassak from InVivo. The conference was organized by Leslie Saxon, chief of cardiovascular medicine at the Keck School, and staff.

Photo: Joshua Sy/Daily Trojan

Jon Mallick

15 Questions for Carmen Puliafito, new dean of the Keck School of Medicine

Since your appointment was announced, what has your life been like?

It's been hectic. I've been wrapping up in Miami and saying goodbye to patients. And I've had an obligation to make that transition as smooth as possible—that's a huge responsibility. But it's also a very exciting time transitioning here, meeting new people and coming into a new university community. USC has been tremendously welcoming—there really is such a thing as the Trojan Family. It's not just a catch phrase.

How is your family doing with the transition to Southern California?

My wife, Janet, moved out a week and a half after I accepted so our boys, Ben and Sam, could start school. She's the hero because she had to leave her job at the University of Miami on short notice and come out here and set up the household while I've been shuttling in between. We have bought a house in Pasadena.

What's the most surprising difference you've noticed about Southern California—compared to Miami or anywhere else you have lived?

I've always been an East Coaster—I've never worked more than two miles from the Atlantic Ocean—so California is exciting and different. It has actually always struck me as its own country in many ways. It's enormous—most people don't realize it has a population of 34 million—and it's really almost an independent entity. I lived in Boston for almost 30 years and people were surprised when I moved to Miami, but I liked the excitement and the cultural diversity—and that's a key feature of L.A. as well.

You've been to some Trojan football games—what did you think of them?

It was exciting. I've always been a sports fan, especially of baseball—I'm a Red Sox fan—and college sports. I love Trojan football and the social events surrounding it. It's a great way to meet people, and it's a great way to get people into the Trojan family and USC. Now that I'm here in Los Angeles, I'll switch my national league affiliation to the Dodgers, but my American League affiliation will be the Red Sox.

You're an expert on the U.S. Postal service. Are you a stamp collector? How did this interest evolve?

I grew up in a suburb of Buffalo, New York, and for entertainment back then we had no Internet, video games or



Keck School Dean Carmen Puliafito tapes a personal message to the campus community. The video can be found by visiting www.usc.edu/keck and clicking, "Read more."

computers. We had a black-and-white TV set with three stations, the evening newspaper and a mailbox. In that environment, a great thing to do was mail away and get stamps. I was 10 or 12 when I started, and it's a great hobby because you learn about American history, world history and geography. My interest in stamp collecting evolved, and eventually I wrote for philatelic magazines and began collecting rare U.S. stamps.

Who was the most influential person in your youth?

My parents. Dad was an electrical engineer for Westinghouse Electric. Dad's priorities were always science, education, the family. Mom was a housewife. I had a very conventional upbringing, but my parents' value systems were focused on education and becoming a professional. My parents are still alive and have been married going on 60 years.

What do you consider your most important career accomplishment?

I was co-inventor of optical coherence tomography, developed with investigators from MIT and Harvard. OCT has changed in a profound way the clinical management of patients with retinal disease and that's something I'm very proud of—it's a great example of bench-to-bedside research.

In the administrative sense, I've been chair of two ophthalmology departments over 16 years and I think I left each of them better than the day I got there. One, [The New England Eye Center at Tufts University] I took from a very small place and took to the top

10. The other [Bascom Palmer Eye Institute at the University of Miami School of Medicine], I took from Number Two to Number One.

You accomplished a number of great things as head of the Bascom Palmer Eye Institute in Miami. How is that organization similar to/different from the Keck School of Medicine of USC?

Bascom Palmer is a large operation—a \$130 million budget, a hospital and multiple clinics and it's similar to the Keck School in that it focuses on medical research, teaching and patient care. The scale and diversity of issues is greater here than at Bascom Palmer, especially in terms of providing great patient care and access as well as financial viability.

What attracted you to the dean's job at the Keck School?

The major thing that attracted me was the commitment of the administration at USC to take the Keck School to the top rank of American medical schools. It's making a real commitment to build a USC-owned academic medical center and to expand the research enterprise and to recruit additional outstanding clinicians and scientists from throughout the U.S.

It was an opportunity to participate in leading a medical school at a very propitious time in its history. There is a real call to action at USC that's not always the case at medical schools. I wouldn't be interested in going to a medical school that didn't have the interest in transformation and growth.

What are the key challenges facing you as you begin your deanship?

To provide strategic direction to the school and to provide an atmosphere of optimism about the future of the school. Also to participate in the successful resolution of the USC University Hospital matter, to recruit new clinical and basic science leaders to join those we already have, and to expand our clinical and basic science research enterprise. I'm interested in building the brand and the reputation of health care delivered by USC doctors and hospitals throughout Southern California.

What do you want the Keck community to know about you?

I'm enthusiastic, energetic and positive. I'm anxious to learn about all aspects of medicine. And I like meeting people. If you didn't like meeting people, you wouldn't do this job. And I've enjoyed all the people I've met—we have a high quality faculty and staff who are very enthusiastic.

I look forward to meeting more of them, as well as students, residents and alumni and others.

What healthcare issues are you most passionate about?

Providing a single standard of care for rich and poor—that's a big one.

Number two, to provide high quality, easy access to doctors. Easy to get someone on the phone, to make an appointment—making the system user-friendly and getting the clinical infrastructure to make that happen.

Is there something you have tried or done that surprises people when they hear about it?

I backpacked across the state of Massachusetts on the Appalachian Trail with my family in 2006. I hiked 100 miles with my family of four. I also ran the Boston marathon in 1999.

What are your favorite recent books?

I'd say *The 900 Days: The Siege of Leningrad*, by Harrison Salisbury—I like history. And, I'm a fan of Phillip Roth and I enjoyed his recent book, *The Plot Against America*. *A Walk in the Woods*, by Bill Bryson, strongly influenced our family's decision to hike the Appalachian Trail.

What is your favorite recreational/outdoors activity?

Running. I like mid-distance running. I did three half-marathons this year and I run about three to 10 miles a day, depending on the day. One of the great things about moving to California is that it has the best running weather in the world. No snow and ice, no humidity.

Is there a RoboDoc in the house? CHLA introduces innovative telemedicine device

When pediatric patients in intensive care units at Childrens Hospital Los Angeles say that a robot dropped by to examine them, they are not imagining things.

For more than a year, the In-Touch Health RP-7 robot has become as familiar as the IV poles and cardiac monitors in the intensive care landscape at Childrens Hospital Los Angeles.

A telemedicine system on wheels, the robot enables doctors who are away from the hospital to instantly interact with patients, their families and staff via laptop computers.

The duties of the robot are overseen by the telemedicine team in both the Pediatric Intensive Care Unit (PICU) and the Cardiothoracic Intensive Care Unit (CTICU) at Childrens Hospital. The team helped create the Laura P. and Leland K. Whittier Virtual PICU. Childrens Hospital is the nation's first pediatric hospital to remotely manage the PICU with the aid of a wireless, mobile remote presence.

Ashraf Abou-Zamzam, medical director of telemedicine for the Whittier VPICU at Childrens Hospital, makes it clear that he regards the device more as a medical tool than as a colleague.

"We are not looking to replace doctors with robots," he said. "We're trying to enhance the delivery of care because there just are not enough intensive care physicians to provide it."

In the U.S., an estimated 1,000 pediatric intensivists cover more than 400 PICUs, according to Randall Wetzel, chief of the Department of Anesthesiology Critical Care Medicine, director of the Whittier VPICU at Childrens Hospital Los Angeles and professor of pediatrics and anesthesiology at the Keck School of Medicine.

Abou-Zamzam views the remote presence robotic technology as a milestone in medicine that will transform health care and improve the outcomes of countless children.

"What we're talking about is a paradigm shift in how sick kids are cared for in their community," he said. "Right now, it's a centralized model in which children are transported to the nearest pediatric facilities with a PICU. That's an incredible stress on the health care system."

It's also stressful for the family, said Abou-Zamzam. Presuming a bed can be found in a pediatric intensive care unit, transporting a child away from his community can place enormous emo-

tional and financial burdens on the patient's family.

"Here's the most stressful time in their lives, when a child is as sick as can be, we uproot them from where they live and their local support systems," he said.

Families must either make the daily commute to the hospital or take up residence nearby.

During the past few years, Childrens Hospital has utilized telemedicine in five Southland hospitals and significantly advanced patient care, research and education nationwide thanks to a multi-year grant funded by the L.K. Whittier Foundation.

Now, medical consultation can be instantaneous, explained Abou-Zamzam. In the time it takes to return a page, the physician can rely on this remote presence, using his laptop computer and an Internet connection to activate the robot in the unit, and "drive" it over to the child's bedside for a first-hand look.

Peering into his laptop screen to

study the child, the doctor can assess the patient's condition (thanks to equipment like a digital stethoscope), analyze physiologic data in real time, and even preside over a code blue trauma alert—a real or suspected imminent loss of life.

"We can beam right in and be virtually there within minutes," Abou-Zamzam said.



Ashraf Abou-Zamzam shows how the new device can project a physician's presence to physically remote locations.

Courtesy CHLA

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Calendar of Events

The HSC Calendar is online at www.usc.edu/hsc/calendar

Monday, Nov. 5

NOON. Fellows' Didactic Teaching Conference. "NephSAP: Hypertension," Mitra K. Nadim, USC. GNH Drs. Dining Rm. A & B. Info: (323) 226-7307

4 P.M. "Research in Progress," Nasimeh Yazdani, USC. GNH 10-340. Info: (323) 226-7307

Tuesday, Nov. 6

9 A.M. Neurology Grand Rounds. "The Therapeutic Potential of Embryonic Stem Cells," Qi-Long Ying, USC. ZNI 112. Info: (323) 442-7686

4 P.M. USC Ctr. for Excellence in Research: Research Workshops for Investigators. "Writing Persuasive Proposals," Bonnie Lund, The Writing Co. CUB 329. Info: (213) 740-6709

Wednesday, Nov. 7

7 A.M. Medicine Grand Rounds. "Cryptococcal Meningitis in HIV Patients," Robert Larsen, USC. GNH 1645. Info: (323) 226-7591

7:30 A.M. - 1 P.M. E-Waste Collection. Staff, students, and faculty can bring in any electronic waste: computers, monitors, etc. San Pablo parking lot. Info: (323) 442-2204

10 A.M. - 2 P.M. Lab Safety Fair. HMR Lobby. Info: (323) 442-2204

11 A.M. Student National Medical Assoc. "6th Annual Bidding for a Better Tomorrow Silent Auction." HSC Quad. Info: (661) 510-8613

NOON. Renal Grand Rounds Conference. "Polycystic Kidney Disease: Advances in Pathogenesis and Novel Therapies," Alan S.L. Yu, USC. GNH 6441. Info: (323) 226-7307

Thursday, Nov. 8

NOON. "Combining Gene Therapy and RNAi to Combat Viral Hepatitis Infection," Mark Kay, Stanford. HMR 100. Info: (323) 442-1283

Saturday, Nov. 10

9 - 10 A.M. "Evaluation and Treatment of Bladder Symptoms in the Female Patient," David Ginsberg, USC. KAM Mayer Aud. Info: (323) 442-2555

10 - 11 A.M. "Male Lower Urinary Tract Symptoms: Bladder and Prostate," David Ginsberg, USC. KAM Mayer Aud. Info: (323) 442-2555

11:15 - 12:15 P.M. "Erectile Dysfunction," David Penson, USC. KAM Mayer Aud. Info: (323) 442-2555

Monday, Nov. 12

NOON. "Post Transplant Immunology," Yasir A. Qazi, USC. GNH Drs. Dining Rm. A & B. Info: (323) 226-7307

Wednesday, Nov. 14

7 A.M. Medicine Grand Rounds. "Typhoid Fever," Joseph Cadden, USC. GNH 1645. Info: (323) 226-7591

NOON. Renal Grand Rounds Conference. "Vascular Access," Vincent Rowe, USC. GNH 6441. Info: (323) 226-7307

Thursday, Nov. 15

NOON. USC Research Ctr. for Liver Diseases. "Mitochondria and Hepatitis C: Role in Pathogenesis, Replication and Innate Immunity," Steven Weinman, Univ. of Texas. HMR 100. Info: (323) 442-1283

Monday, Nov. 19

NOON. Fellow's Didactic Teaching Conference. "NephSAP: Critical Care," Mitra K. Nadim, USC. GNH Drs. Dining Rm. A & B. Info: (323) 226-7307

Notice: Deadline for calendar submission is 4 p.m. Monday to be considered for that week's issue—although three weeks advance notice 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. 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.

Film screening highlights diabetes epidemic

By Jennifer Chan

The USC Annenberg School of Communication's California Endowment Health Journalism Fellowship will host an advance film screening of *Discovery Health's Diabetes: A Global Epidemic*, featuring CHLA's Francine Kaufman, professor of pediatrics at the Keck School of Medicine.

The documentary, which airs publicly on Nov. 18, is based on Kaufman's book *Diabesity* and takes viewers to the crowded medical clinics of India, the urban slums of Brazil and an orphanage for children with diabetes in Capetown, South Africa.

Diabetes currently affects 250 million

people on seven continents and threatens to become one of the costliest and deadliest epidemics worldwide.

The screening will be followed by a panel discussion with Kaufman, Peter Clarke, professor of preventive medicine at the Keck School of Medicine, and Andrew Murr, *Newsweek's* Los Angeles bureau chief.

The screening will be held on Nov. 8 from 4 to 6 p.m. at the Annenberg School of Communication on USC's University Park Campus. The event is free and open to the public. RSVPs are requested.

For more information, call (213) 437-4419.

SMOG: Study links driving with harmful exposure

Continued from page 1

Results showed that the two main sources of pollution were diesel-fueled trucks on freeways and hard accelerations on surface streets. Surprisingly, overall congestion was only a factor on arterial roads and, even then, the highest concentrations of pollutants occurred only when vehicles were accelerating from a stop, Fruin said.

"This study was the first to look at the effect of driving and traffic conditions at this level of detail and to demonstrate the specific factors leading to the highest pollutant exposures for drivers," Fruin said. "The extent that a specific type of vehicle—diesel trucks—dominated the highest concentration conditions on freeways was unexpected."

Driving with the windows closed and recirculating air settings can modestly reduce the particle pollution exposures but does not reduce most gaseous pollutants. Driving at speeds lower than 20 miles per hour can also reduce exposure, but none of these measures is as effective as simply cutting back on driving time, he said.

"Shortening your commute and spending less time in the car will signif-

icantly reduce your total body burden of harmful pollutants," Fruin said.

Off-road transportation such as taking the train will have a significant impact. Biking or walking are alternatives that also provide valuable health benefits from exercise, he said.

The study was supported by the California Air Resources Board.

S. Fruin, D. Westerdahl, T. Sax, C. Sioutas and P.M. Fine. "Measurements and predictors of on-road ultrafine particle concentrations and associated pollutants in Los Angeles," *Atmospheric Environment* (2007). Doi: 10.1016/j.atmosenv.2007.09.057

DID WE SAY THAT?

An article in the Oct. 26 issue of *HSC Weekly* failed to identify fully researcher Michael Kahn. He is professor of biochemistry and molecular biology at the Keck School of Medicine and professor of molecular pharmacology and toxicology at the USC School of Pharmacy. *HSC Weekly* regrets the omission.

HSC NEWSMAKERS

Complete listing at: www.usc.edu/uscnews/usc_in_the_news/

An Oct. 29 *Los Angeles Times* article quoted dietician **Carol Koprowski** about the scientific evidence, or lack thereof, behind the "sugar high."

An Oct. 29 *Los Angeles Times* article noted that **USC/Norris Comprehensive Cancer Center** was honored at a Hockey Fights Cancer Awareness Night in Anaheim.

An Oct. 29 WebMD article quoted pharmacologist **James Adams** about the history of zombies. CBS News online also ran a similar story.

An Oct. 29 *Los Angeles Daily News* noted that **USC** and **UCLA** started requiring first-year medical students to spend half a day at nonprofit bereavement support center Our House, to learn about the grieving process.

An Oct. 25 WebMD article quoted environmental health expert **Frank Gilliland** in an article about how people can protect themselves against wildfire smoke.

An Oct. 23 Associated Press article quoted fertility expert **Richard Paulson** about human egg freezing.

An Oct. 23 *Los Angeles Times* article quoted breast cancer expert **Christy Russell** on a recent study that shows an increasing number of women having double mastectomies.

An Oct. 23 *Los Angeles Times* article highlighted the artificial retina device developed by the **USC Doheny Eye Institute** in conjunction with Second Sight Medical Products Inc.

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