Near-roadway air pollution a major contributor to asthma in Los Angeles

By Leslie Ridgeway

Research conducted at USC indicates that at least 8 percent of the more than 300,000 cases of childhood asthma in Los Angeles County can be attributed to traffic-related pollution at homes within 75 meters (a little less than 250 feet) of a busy roadway.

The study also indicates that previous estimates of childhood asthma exacerbation related to air pollution may have underestimated the true burden of exposure on society. The research was published online Sept. 24, 2012, in Environmental Health Perspectives and was conducted in collaboration with the Swiss Tropical and Public Health Institute and Sonoma Technology Inc. The study focused on the Los Angeles basin.

“Early findings suggest that there are large and previously unappreciated public health consequences of air pollution in Los Angeles County and probably other metropolitan areas with large numbers of children living near major traffic corridors,” said Rob McConnell, professor of preventive medicine, Keck School of Medicine of USC.

The USC study also looked at new state of California policies intended to cut back on vehicular greenhouse gas emissions that cause climate change. An important goal of these policies is to reduce vehicular emissions of greenhouse gases, both by improving fuel efficiency and reducing vehicle miles traveled by increasing use of public transportation.

As part of these policies, housing developers would be offered incentives, such as speeding up environmental review, to design projects located closer to transit stops with bus or rail service that will encourage use of fuel-efficient mass transit. The investigators note, however, that transit stops are often located on or near busy roads and that there has been little study of the impact of these policies on exposure to children living near major roadways.

USC dentists, physicians deliver free health care at four-day clinic

By Hope Hamashige

A line of patients extended out toward the parking lot from the front door of the Los Angeles Memorial Sports Arena, and the floor was bustling with activity and the buzzing of dozens of dental drills.

Just steps away from the noisy sports arena floor, several USC gynecologists were seeing patients in a quiet, cozy and private clinic for women that was set up inside what is usually a locker room.

One of them, Hindi Stohl, a resident at Los Angeles County-USC Medical Center, was volunteering for the second time at the Los Angeles Care Harbor free clinic, a four-day event that brings top doctors and nurses from around the area to provide free medical, dental and vision services to uninsured and underinsured populations in Los Angeles.

The Keck School of Medicine of USC is one of the sponsors of the annual event, held Sept. 27-30.

Each year, dozens of faculty members, residents and students volunteer to help treat approximately 4,800 attendees who camp out at the front door of the sports arena in order to get wristbands entitling them to free medical examinations.

Stohl said many of the women that were seated outside the makeshift clinic had not had pap tests or mammograms in many years.

“There is never had a routine examination at all,” said Stohl, noting that the privacy of the women’s clinic was a caring touch. “And, clearly, a lot of people need this kind of help.”

The uninsured and underinsured women attending the free clinic will be notified once their test results are in and will be told what kind of follow-up care they are going to need and where they can get it.

Jennifer Lee, a USC ophthalmology resident at the Doheny Eye Institute, spent much of her time at Care Harbor explaining to her patients that their trouble with their vision was related to another health problem, such as diabetic retinopathy, and that they needed follow-up treatment.

The Ostrow School of Dentistry of USC parked its mobile dental clinic on the floor of the sports arena where, in addition to doing hundreds of fillings and extractions, students and faculty were able to perform as many as 20 root canals each day.

“This is good for the community and also for the students because it is a really good way to get experience,” said Santosh Sundaresan, assistant professor of clinical dentistry at the Ostrow School. “And because so many of these people have not been to a dentist, the decay is extreme.”
Physician assistant student, instructor start recruitment pipeline

By Allison Trinidad

As fat back as Maria Maldonado can remember, her mother drove a taco truck, serving hamburgers, burritos and chiles rellenos in working-class neighborhoods like Alameda, Compton and Watts. “I grew up in the lunch truck business,” the East Los Angeles native said. “Needless to say, we didn’t have health insurance so getting sick was not an option. My mom told us to think happy thoughts.”

But, at age 9, Maldonado couldn’t conjure up enough happy thoughts to will away the pain of a uterine infection. Her mom took her to the emergency room, where a team of health care providers eased her suffering. “I decided then that I wanted to be a doctor,” Maldonado recalled. “I wanted to work in health care, and my world was black and white—you were a nurse or a doctor.”

Yet, Maldonado, now a mother herself, is neither a doctor nor nurse. She is a physician assistant (PA) and a new clinical instructor in the Keck School of Medicine’s primary care physician assistant program. She graduated from the three-year, USC master’s program in 2006 as a National Health Service Corps Scholar, which fully financed her education with loans and scholarships in exchange for three years’ service in a medically underserved community. Maldonado fulfilled her three-year commitment at the Community Health Alliance of Pasadena (CHAP), a nonprofit that provides medical, dental and behavioral health services to children and adults. “That was definitely a population in need, mostly Spanish-speaking,” Maldonado said. “It was a very challenging, but very rewarding, experience. It was a great place to learn because you saw so much.”

It was at CHAP where Maldonado first met Jeanette Trejo, a California State University Long Beach student who shadowed her in the clinic in 2008. Coincidentally, four years later, they both landed at USC. Their experience together at CHAP helped inspire the creation of a recruitment pipeline for physician assistant students specifically from communities with limited access to health care, such as East Los Angeles. The hope is that, once trained, those health professionals would return home to work.

The project is just getting off the ground, as Maldonado and Trejo develop relationships with area schools. They hope to organize high school and college visits to talk about what PAs do and how to pay for PA school.

Trejo, now a second-year USC physician assistant student who saw first-hand the barriers to health care access in her own community, said a recruitment pipeline would have been nice to have as a younger student. “I feel like I would have benefited so much from having the guidance and support the pipeline project is intended to have while I was in high school or as an undergraduate,” Trejo said. “[But] having the opportunity to start now as a student to reach out to other students just makes attending PA school so much easier.”

Gift bolsters future of urology education, research at USC

By Amy E. Hamaker

Felix Yip, clinical professor at the Keck School of Medicine of USC and chairman of surgery at Garfield Medical Center in Monterey Park, Calif., holds fond memories of his internship at USC in 1980.

Since then, his working relationship with USC has grown as he created his own practice in urology. Thanks to his recent gift to the USC Institute of Urology, others will be able to follow in his footsteps.

Supporting education is nothing new to Yip and his family. USC Urology has been a focus for the Yips’ philanthropic efforts since he created his own practice in urology. Thanks to his recent gift to the USC Institute of Urology, others will be able to follow in his footsteps.

Supporting education is nothing new to Yip and his family. USC Urology has been a focus for the Yips’ generosity in the past. July 2013 will mark the first Felix and Mildred Yip Fellowship in Advanced Robotics and Laparoscopy for the USC Institute of Urology, sponsored by a previous gift. In addition, the Yips have sponsored the USC Yip Center for Head & Neck Oncology Research and the UCLA Felix and Mildred Yip Endowed Professorship in Dentistry. Yip believes any gift is worthwhile and hopes the Asian community in Los Angeles will follow suit. “For me, a huge part of my motivation is seeing new energy and knowledge coming in, and working with residents, fellows and staff,” explained Yip. “USC urology was already at a world-class level when Dr. [Inderbir] Gill came, bringing in new technology, methods of how to treat disease and excitement in metropolitan Los Angeles. I truly believe investment in this kind of education will yield the best return.”

Deadline looms for Science Film Competition

By Jon Nalick

All USC students are invited to enter USC’s second annual Science Film Competition. The deadline for competition registration is Oct. 12. The final deadline for submission of completed entries is Jan. 10. A film showcase and awards ceremony will be held Jan. 23 at the USC School of Cinematic Arts.

The first-prize winner receives $3,000, second prize $2,000 and third prize $1,000. There will also be honorable mentions and possibly special category prizes.

Last year, 90 students in 19 teams entered USC’s first science-themed movie competition, organized by Clifford Johnson, professor of physics and astronomy in USC Dornsife College of Letters, Arts and Sciences. The competition is open to teams of USC students from any program, on any of the USC campuses. Entries must be from interdisciplinary teams of students. At least one person on the team must be studying a science or engineering-related field, and at least one team member must be studying cinema, journalism or communications.

Each team is asked to enter a short film that explains and illustrates a scientific concept, principle or issue for a wide non-expert audience. It can be in any genre—documentary, animation, drama, even romantic comedy. The objective is to better communicate science to the general public. In essence, the competition helps future filmmakers, scientists, writers, journalists—or students pursuing any field—learn how to communicate scientific ideas. A jury of USC faculty and outside experts will determine the winners.

After the Oct. 12 registration deadline, a series of events for contestants will be offered, including workshops with filmmakers and/or scientists.

To learn more about the competition visit sciencefilm.usc.edu. Students interested in entering the contest can connect with other students to form teams at sciencefilmblog.usc.edu.
Lynch syndrome clinic created

By Hope Hamasahige

A pair of doctors from USC Norris Cancer Hospital has teamed up with a genetic counselor to create a clinic for patients with Lynch syndrome who are at high risk of developing several types of gastrointestinal and gynecologic cancer.

Jacques Van Dam, director of clinical gastroenterology at Keck Hospital of USC, and Yvonne Lin-Liu, assistant professor of obstetrics and gynecology at the Keck School, and Katrina Lowstuter, genetic counselor at USC Norris Cancer Hospital, have created an integrated practice to help patients with Lynch syndrome stay on top of their screenings in attempt to keep them cancer-free.

Lynch syndrome is a hereditary disorder that puts people at higher than normal risk of developing several types of aggressive cancers including colorectal, endometrial and ovarian cancer. It strikes about 1 in 400 people and is also associated with higher incidence of several other cancers including stomach, small intestine, pancreas, prostate, liver, kidney and urinary tract.

People with Lynch syndrome are often affected at an early age and so need to start screenings when they are younger than the recommended age for people who do not have this disorder.

Lowstuter works with patients to help them determine their risk of Lynch syndrome and counsel them as to whether should have genetic testing. Van Dam and Lin-Liu are working together to give patients the opportunity to coordinate their screenings so that they are completed in a single day.

Lin-Liu explained that the main reason that patients with Lynch syndrome fall behind on their screenings is that they generally have to see multiple doctors each year to stay current.

“We see a lot of attrition because of the amount of screening needed,” said Lin-Liu, who added that most institutions do not or cannot streamline the screening.

Van Dam pointed out that the program is unique in Southern California. “This is something that demonstrates USC’s commitment to providing advanced cancer care.” The team has already introduced their new program as part of Grand Rounds at Huntington Hospital and is planning to make similar presentations at several other hospitals in the area.

PSOC mulls future of cancer research

David Agus, professor of medicine and engineering at the Keck School of Medicine of USC and the USC Viterbi School of Engineering, welcomed attendees to the Second Annual Symposium of the USC Physical Sciences in Oncology Center (PSOC) by reminding them that the future of cancer research will involve the expertise of all backgrounds creating novel solutions.

Agus, who is also the senior scientific investigator at the USC PSOC, said that current cancer treatments are not working well enough and that advancing the field requires new ways of thinking.

In a nod to the idea of promoting interdisciplinary dialogue, this year’s keynote speakers included Corby Kummer, a senior editor of The Atlantic magazine who discussed the relationship between food and health, and David A. Kirby, the author of Labcoats and The Atlantic, who talked about the role of science in filmmaking.

The USC Physical Sciences in Oncology Center is one of 12 National Cancer Institute-designated PSOCs in the country.

AIR Policies needed to reduce pollution

continued from Page 1

The study concludes that better information is needed to develop the optimal mix of policies that reduce sprawl, encourage walking and use of mass transit to reduce vehicle miles traveled, greenhouse gas emissions and regional air pollution, as well as to reduce children’s near-roadway exposure to emissions from vehicles still traveling on roadways.

“Plans to reduce greenhouse gas emissions and combat climate change offer an opportunity to develop ‘win-win’ strategies that will maximize the health benefits from reduction both of greenhouse gases and of air pollutants that directly harm children,” McConnell said.

“There is also emerging evidence that other diseases may be caused or exacerbated by urban air pollution, including arteriosclerosis, lung cancer, chronic obstructive pulmonary disease (COPD) and neurological disorders,” McConnell added. As a result, “policies to combat climate change may have near-term health benefits beyond reducing the burden of disease due to asthma.”

The researchers estimated the effects of air pollution on children suffering from asthma by using data from sources including the Children’s Health Study, a long-term study of effects of air pollution ongoing since 1993.

Regional air pollution measurements from the U.S. Environmental Protection Agency and area maps were used to estimate exposure to near-roadway pollution in the Los Angeles area. This information was linked to population data.

Asthma exacerbation in this study was connected to regional pollutants including nitrogen dioxide and ozone that cover large parts of the air basin, and to near-roadway pollutants that are responsible for the development of asthma.

The researchers found that living near busy roads contributed disproportionately to the more serious exacerbations of asthma in children, including emergency room visits and hospitalizations.

In addition, a 20 percent reduction in children’s near-roadway pollution exposure would result in an estimated 5,900 fewer cases of childhood asthma in the county, according to the research, whereas a 20 percent increase in exposure would result in 5,900 more cases of asthma.
**Calendar of Events**

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

**Monday, Oct. 8**
- 2 – 3 p.m. UC CTSA Career Development Seminar Series. “Managing People and Creating High Performance Teams.” Teranise Wolfe, USC. GC2 250. Info: (323) 442-8281

**Tuesday, Oct. 9**
- 11:30 a.m. – 1 p.m. The Annual Primary Care Week. “The Value of Primary Care Physicians.” Various speakers. CRT LLS 509/510. Info: (323) 442-1313
- Neon. Psychiatry Grand Rounds: “Mental Depression and Disrupted Attachment: Implications for Mental Health Across the Lifespan.” Diana Lynn Barnes, The Center for Postpartum Health. ZNI 112. Info: (323) 442-4865

**Wednesday, Oct. 10**
- 11:30 a.m. – 1 p.m. The Annual Primary Care Week. “Financing A Career in Primary Care.” Various speakers. NRT Aresty Auditorium. Info: (323) 442-1313

**Thursday, Oct. 11**
- 11:30 a.m. – 1 p.m. The Annual Primary Care Week. “Financing A Career in Primary Care.” Various speakers. Alburnett Campus: Building A-11, Room 187. Info: (323) 442-1313

- 2 – 4 p.m. Center for Excellence in Research Workshop. “Early Career/Young Investigator Proposal Workshop.” James Murday, USC. NML West Conference Room. Info: (213) 740-7099

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

**Friday, Oct. 12**
- 8:30 a.m. Surgical Grand Rounds., Joseph Carey, USC. DOH 100. Info: (323) 442-9604

- 9 a.m. – 3 p.m. Ming Hsieh Institute Symposium: Various speakers. NRT Aresty Auditorium. RSVP www.usc.edu/swpv (code: jsuchi)

- 11 a.m. Hematology Grand Rounds. “Von Willebrand Disease Diagnosis and Management,” Carol Kapner, USC. IPT C2210. Info: (323) 685-9590

**Saturday, Oct. 13**
- 2 – 4 p.m. USC Norris Cancer Hospital and Bloomberg’s Breast Cancer Awareness Month Event. “In the Kitchen.” Michael Press and Carmen Martinez, USC. Bloomberg’s Century City. Reservations on Level 3. Info: (323) 772-7184

- 2 – 4 p.m. USC Norris Cancer Hospital and Bloomberg’s Breast Cancer Awareness Month Event. “Ready, Set, Pink Fashion.” Sue Ellen Caudenovuo and Alicka Syres, USC. Bloomberg’s Beverly Center. Info: (323) 772-7183

**Monday, Oct. 15**

- Neon. Global Health Service Partnership Rebooting Event. Vanessa Kerry, founder and CEO of GBHC, will be giving a presentation to introduce the program and provide interested candidates with more information on the requirements and application process. NML 7409. Info: (323) 685-0419

**Notice:** Deadline for calendar submission is 4 p.m. Monday to be considered for that week’s issue—although three weeks’ advance notice of events is recommended. Please note that timely submission does not guarantee an item will be printed. Send calendar items to The Weekly, KAM 400 or fax to (213) 740-2812, or email to elbaauw@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.

---

**Health policy expert warns of medical ‘overtreatment’**

By Hope Hamashige

The practice of medicine is at a crossroads, Shannon Brownlee told a packed house in the Mayer Auditorium last week. It is up to this generation of medical students to change the course of a profession that, as she sees it, has lost its way.

“My hope is that you will walk out today inspired and energized and a little radicalized,” she said.

Brownlee, acting director of the New America Foundation Health Policy Program in Washington, D.C., and an instructor at the Institute for Health Policy and Clinical Practice at Dartmouth Medical School, said future doctors not only have the opportunity to help their patients with medical needs, but also should accept the role of agents of change for a health care system in need of a sweeping overhaul.

“That the U.S. health care system is ailing is a widely accepted view, but Brownlee described a system that is in need of nothing short of a revolution to get it back on track.

It perhaps came as little surprise that the author of Overtreated: Why Too Much Medicine Is Making Us Sicker and Poorer, believes that the biggest problem in U.S. medicine is overtreating patients.

She pointed out that the amount of money spent on unnecessary costs within health care amounts to $210 billion, more than enough money to pay for what she called “gold-plated health care” for all Americans.

At the heart of overtreatment, she said, is a lack of communication between doctors and their patients. That lack of communication often results in patients choosing treatments that may extend their life, but not their quality of life, because they don’t fully understand their options.

Brownlee said that studies show patients are far more conservative and want fewer treatments than their doctors believe they do, particularly at the end of life, but their doctors often have not taken the time to understand exactly what their patients want and need.

Studies have shown, she said, that when there is open communication between patients and doctors, it leads to a true understanding of their options, and patients often choose to do less.

“We need a new definition of medical error that would involve giving patients something they don’t need,” she said. “Overtreating patients has to be acknowledged for what it is — a failure to care for the patient.”

---

**Minority Health Conference slated for Oct. 27**

The Keck School of Medicine of USC and the David Geffen School of Medicine at UCLA will team up on Oct. 27 to host the USC-UCLA Minority Health Conference of 2012.

This year's conference, titled “From Struggles to Revolution” and part of the KaMing Hsieh Institute Symposium, will be held on the Health Sciences campus from 8 a.m. to 5:30 p.m.

The event will feature several speakers who are working to advance the cause of health equity in their communities, including Doreena Wong, project director of the Health Access Project.

The USC-UCLA Minority Health Conference, which is more than a decade old, aims to educate medical students and students in other health care professions, as well as physicians. It is also open to undergraduate students.

For information and registration, visit www.minorityhealthconference.org.

---

**In case of an emergency...**

Call the Emergency Information Phone: (213) 740-9233 The emergency telephon system can handle 1,400 simultaneous calls. It also has a backup system on the East Coast.

Visit the USC Web: [http://emergency.usc.edu](http://emergency.usc.edu) This page will be activated in case of an emergency. Backup Web servers on the East Coast will function if the USC servers are incapacitated.