“I’ve been studying [obesity] for 20 years, and if you put French fries in front of me, I’ll eat them... We are wired to eat. Reversing the cues and training people [to eat well] is hard.”

— Michael Goran, founding director of the USC Childhood Obesity Research Center

Pollution’s impact may be underestimated

By Meghan Lewit

Heavy traffic corridors in the cities of Long Beach and Riverside are responsible for a significant proportion of preventable childhood asthma, and the true impact of air pollution and ship emissions on the disease has likely been underestimated, according to researchers at USC.

The study, which appears in an online edition of the American Journal of Public Health, estimated that nine percent of all childhood asthma cases in Long Beach and six percent in Riverside are attributable to traffic proximity.

The study also found that ship emissions from the Los Angeles-Long Beach port complex contributed to the exacerbation of asthma. For example, about 1,400 yearly episodes of asthma-related bronchitis episodes in Long Beach (21 percent of the total) were caused by the contribution of ship emissions to nitrogen dioxide levels in the city.

Although there has been extensive research on the effects of traffic proximity on asthma risk, this study is one of the few that has estimated the number of cases—or “burden of disease”—associated with traffic in specific high risk communities, said principal investigator Rob McConnell, professor of preventive medicine at the Keck School of Medicine of USC and deputy director of the Children’s Environmental Health Center at USC.

“The traditional approach to estimating the burden of air pollution-related disease has markedly underestimated the true effect,” McConnell said. “Our results indicate that there is a substantial proportion of childhood asthma that may be caused by living within 75 meters (81 yards) of a major road in Long Beach and Riverside. This results in a much larger impact of air pollution on asthma symptoms and health care use than previously appreciated. This is also one of the first studies to quantify the contribution of ship emissions.”

See POLLUTION, page 2

USC study shows cost-effectiveness of sheltering Los Angeles homeless

By Meghan Lewit

Placing four chronically homeless people into permanent supportive housing in Los Angeles resulted in more than $80,000 per year in savings to taxpayers and improved quality of life for the individuals, according to a recent study led by Michael R. Cousineau, associate professor of preventive medicine at the Keck School of Medicine, and Heather Lander, Project Specialist at the USC Center for Community Health Studies.

The Homeless Cost Study—a collaboration between the Center for Community Health Studies and the United Way of Greater Los Angeles—profiled four previously homeless individuals who had been placed in a supportive housing environment. Investigators found that the total cost of public services spent on the four individuals during two years living on the street was $187,288. The cost of public services dropped by more than $20,000 per person during two subsequent years spent in stable, permanent housing.

“By looking at the individual stories behind these numbers, we were able to understand the real social, financial and health factors impacting the homeless,” Cousineau said. “There are more homeless in Los Angeles than in any other city in the nation, and there is compelling evidence that getting people off the street...
Air pollution shown to be greater contributor to childhood asthma than generally recognized

Researchers estimated the number of asthma cases and related complications that occurred because of air pollution, using information from epidemiological studies that they then applied to current exposure to air pollution and traffic in Southern California. The results showed that approximately 1,600 cases of childhood asthma in Long Beach and 690 in Riverside could be linked to living within 81 yards of a major road.

“The impact of roadway proximity on the overall burden of asthma-related illness is remarkable,” McConnell said. “Air pollution is a more important contributor to the burden of childhood asthma than is generally recognized, especially to more severe episodes requiring visits to a clinic or emergency room.”

Unlike regional air pollutants, the local traffic-related pollutants around homes and their effects are not generally regulated, he noted. “This is a challenge to communities, to regulatory agencies and to public health,” McConnell said. “Traffic-related health effects should have a central role on the transportation planning agenda.”

The study, an international collaboration between USC, the Center for Research in Environmental Epidemiology in Spain and the University of Basel in Switzerland, was supported by the National Institute of Environmental Health Sciences, the U.S. Environmental Protection Agency, the South Coast Air Quality Management District, the Horning Foundation, the Center for Research in Environmental Epidemiology (Switzerland) and the Fundacio Institut Municipal d’Investigacio Medica (Barcelona).

The authors acknowledged the insights of the staff and members of the Long Beach Alliance for Children with Asthma and the Center for Community Action and Environmental Justice.

Students completing their clinical rotations at LAC+USC Medical Center have a lot to talk about.

“To ensure that Keck School of Medicine students receive excellent clinical education and acquire the necessary skills to flourish in postgraduate residency training, significant changes have been made to the years III and IV clinical curriculum. To bolster students’ learning experiences, the Internal Medicine rotation for medical students transitioned from three weeks of inpatient and three weeks of outpatient medicine to six weeks of inpatient medicine.”

The change, implemented in July 2009, was accompanied by the addition of new call rooms in the new LAC+USC Medical Center, making it possible for medical students to take overnight call during the rotation. These changes should significantly improve the students’ experience during one of the most important clinical rotations in medical school.

Pamela Schaff, assistant dean for curriculum, said the new changes should help improve the clinical education of medical students. “Clerkship faculty have placed renewed emphasis on clinical skills instruction. At the bedside and in workshops and skills labs, students are observed and receive feedback on their interviewing and physical exam skills.”

According to the 2009 Independent Student Assessment conducted by Keck medical students, students agree that these changes will greatly enhance the learning experience.

Students document their clinical experiences with the new Clinical Experience Portfolio, which facilitates tracking and evaluation of students’ clinical experiences, and allows clerkship directors to review and respond quickly to any issues that may arise during the overall clinical experiences of students.

One factor helping improve those experiences is the new medical student lounge in the County Hospital, which includes a sitting area with a flat screen television, a room with computer stations and a printer, and an adjoining room with chairs, tables and lockers for storage. Brand new furniture completes the space, and the walls will soon display artwork from medical students.
Researchers characterize risk factors for heart condition in pregnant women

By Meleeneh Kazarian

Researchers at the Keck School of Medicine have defined the clinical characteristics and risk factors in women with peripartum cardiomyopathy (PPCM)—a condition with still an unknown cause leading to deterioration of cardiac function during or after pregnancy.

The observations were published in the Journal of Cardiac Failure on Nov. 8.

Uri Elkayam, professor of medicine and obstetrics and gynecology and director of the Heart Failure Program at LAC+USC Medical Center, as well as physician in charge of the cardiology high risk pregnancy service, headed the study, along with researchers at Cedars-Sinai Medical Center and Louisiana State University.

Researchers reviewed the medical records of 182 patients diagnosed with PPCM for major adverse events, including death or complications that were life-threatening or resulted in long-term morbidity. Twenty-five percent of patients had at least one major adverse event, and 84 percent of the events occurred during the first year after diagnosis of PPCM.

Patients experiencing major adverse event were more often younger and non-Caucasian. Because symptoms of this condition are often attributed to normal changes of pregnancy, diagnosis was delayed or missed in almost half of the women, 50 percent of whom developed major adverse events including death, cardiac and respiratory arrest, strokes and lasting brain damage.

The most powerful predictor of major adverse events was the degree of initial myocardial insult caused by depression of the left ventricular function at the time of diagnosis, as well as delayed recognition of the disease.

The findings suggest the need for increased awareness of this condition among health professionals caring for women during pregnancy and after the delivery in order to assure timely diagnosis and early therapy to prevent further complications.

OBESITY: Expert panel examines causes, potential remedies of epidemic

Continued from page 1

“We are wired to eat. Reversing the cues and training people [to eat well] is hard.”

“We are trained to look at evidence-based medicine and outcomes,” said Melina Jampolis, a board certified internist and CNNHealth.com diet and fitness expert. “It’s more complicated than that.”

Asked by King if there were anything they would ban in order to deter obesity, the panelists listed sweetened beverages and cereals and the marketing of them to children. Panelists also expressed concern that obesity trends are undoing positive strides made in the next generation,” said P.K. Shah, director of cardiology at Cedars-Sinai Medical Center and Larry King’s cardiologist. “This could be the first generation that does not outlive their parents.”

The panel was sponsored by the Keck School of Medicine, Cope Health Solutions, The Larry King Cardiac Foundation and LAC-USC Medical Center, and presented by Abbott Laboratories.

HOMELESS: Housing homeless proves cheaper than not

Continued from page 1 and into permanent housing has significant individual and community benefits.”

The qualitative study profiled a 52-year-old white female, a 58-year-old white male, a 32-year-old Hispanic male and a 61-year-old African American male. Five principal cost areas—substance abuse, physical health, mental health, criminal justice and housing—were analyzed in order to determine the total taxpayer cost to provide social services. During their time living on the street, the individuals regularly used emergency services for health and alcohol issues. All four had been arrested at least once and spent time in jail, and two of the four had been hospitalized. After two years in permanent housing, which included access to mental and physical health and education classes, investigators observed increased stability and improved quality of life for all four participants.

During the study time period, only one individual visited the emergency room and none entered the criminal justice system. The only area where costs increased was mental health, which is a positive finding because people who use community mental health resources are less likely to use the hospital emergency room, Cousineau noted.

“Government financing of supportive housing is a wise public investment. It saves taxpayer dollars and makes important contributions to solving homelessness,” he said.

CONGRATULATIONS, RESEARCHERS!—Keck School of Medicine Dean Carmen A. Puliafito (left, center) hosted a luncheon Nov. 3 to celebrate the $34 million in American Recovery and Reinvestment Act funds received by Keck School researchers. Hundreds attended the event at Harry and Celeste Pappas Quad, which featured barbecue foods and music.

The news was also covered by The New York Times.

A Nov. 9 Los Angeles Times article quoted assistant professor of clinical psychiatry and behavioral sciences Thomas Hicklin about suicide clusters in communities.

A Nov. 9 Bloomberg News article quoted professor of psychiatry, neurology and gerontology Lon Schneider in an article on pharmaceutical companies that routinely pay fines for marketing drugs for unapproved uses. MediaPost also quoted Schneider.

A Nov. 4 Press-Telegram article featured research led by professor of preventive medicine Rob McConnell which found that traffic corridors and goods movement in Long Beach and Riverside are a major contributor to childhood asthma. KNBC-TV, the Press-Enterprise, the Contra Costa Times, the Desert Sun, Valley News, the Long Beach Report and Medical News Today also featured the research.

On Nov. 4, KABC-TV quoted professor and executive director of the University Park Health Center Lawrence Neinstein about a Los Angeles County health department H1N1 vaccine clinic being hosted at USC.

On Nov. 2, KTLA-TV reported that assistant clinical professor of psychiatry Drew Pinsky performed cardiorespiratory resuscitation on a high school football player who suffered a head injury and stopped breathing during a game in which Pinsky’s son was playing.

Pinsky performed CPR until paramedics arrived, and the player later received successful surgery to relieve pressure on the brain, the story reported.

On Nov. 1, a special KNBC-TV report featured associate professor of research in preventive medicine Michael Cousineau and associate professor of medicine and chief, division of geriatric, hospital and general internal medicine David Goldstein discussing health care reform.

An Oct. 30 widely carried Associated Press article reported that actor Dennis Hopper is being treated for prostate cancer through a special program at USC. The news was also covered by The New York Times.
Calendar of Events
This Calendar of events is also online at www.usc.edu/hscalendar for the Health Sciences Campus community

Monday, Nov. 16


Noon. “Case Presentations.” Mehrald Saliminejad, USC. IPT 21101. Info: (323) 499-7995

Tuesday, Nov. 17

Wednesday, Nov. 18
8:30 a.m. “Building Pharmaceutical Anti-Counterfeiting Programs,” Various speakers. CHP 106. Info: (323) 442-3102

8:30 a.m. “IIH1 Updates,” Paul Holtom, USC. GNH 11321. Info: (323) 226-7923

Noon. ZNI Seminar. “Are Presynaptic NMDA Receptors Postsynaptic?” Craig Jaba, Oregon Health & Science Univ. ZNI 112. Info: (323) 442-2144


4 p.m. “Developing & Submitting a DoD Grant Application,” James Mursadi, USC. BMT 407. RSVP: usccer@usc.edu

Thursday, Nov. 19
Noon. “Nonalcoholic Fatty Liver Disease,” Sandra Erickson, UC San Francisco. EMB 180. Info: (323) 442-1283

Friday, Nov. 20
8 a.m. Pathology and Laboratory Medicine Grand Rounds. “Teaching and Assessing ACGME Competencies,” Julio Nyquist, USC. NBT 7409. Info: (323) 442-1180

8:30 a.m. “Biomedical Nanoscience Retreat,” Sarah Hamm-Alvarez, USC. Descanso Gardens, La Canada Flintridge. RSVP: usccer@usc.edu

8:30 a.m. USC Dept. of Surgery 11th Annual Leonard and Marie Louise Rosoff Visiting Professor Seminar. “Multidisciplinary Strategies for the Treatment of Esophageal Cancer.” Warren Heldtetter, Univ. of Texas. DOH 109. Info: (323) 442-2506


Noon. “Case Presentations.” John Kim, USC. OPT ASC129. Info: (323) 409-7995

Monday, Nov. 23

Saturday, Nov. 25
Noon. “Uric Acid and Renal Disease.” Dalitsha Corry, UCLA. GNH 4420. Info: (323) 226-7387

Monday, Nov. 30


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 (323) 442-2832, or e-mail to etblausw@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.

Benefits open enrollment ends Nov. 20
The time to make changes to your benefits is now. For flexible spending accounts—even if no changes are needed—employees must re-enroll each year. Changes should be made via etrac. For questions, contact HSC Personnel Services, Keith Administration Building, Room 409. Walk-in hours are Monday through Thursday 8 a.m. to 4 p.m. You may also call to make an appointment outside of walk-in hours. To contact the office, call (323) 442-1030 or e-mail locpers@usc.edu.

USC Health Sciences
Public Relations and Marketing
1975 Zonal Ave.
KAM 400
Los Angeles, CA 90033

Non-Profit Organization
U.S. POSTAGE PAID
University of Southern California

By Meghan Lewit
Fifteen-year-old Otana Jakpor’s essay on how she spent her summer vacation would include leading demonstrations on how to map demographic data and conducting research on diesel emissions from locomotives and other railway equipment.

The high school senior recently interned at the Southern California Environmental Health Sciences Center (SCEHSC), directed by Frank Gilliland at the Keck School of Medicine, where she focused on using U.S. Census Bureau information to map and study the demographics of populations living near rail yards.

“I started off by reading a lot. I learned about the Los Angeles ports, goods movement and how trucks and trains pollute the air,” said Jakpor, who woke at 5 a.m. every day to take the train from her home in Riverside to the USC Health Sciences Campus. “I didn’t know about all the health effects that could come from living near a rail yard. It’s really an environmental justice issue.”

By the end of her internship, Jakpor was leading tutorials for SCEHSC staff on how to do the demographic data mapping. In September, she received special recognition from Lisa Jackson, administrator of the U.S. Environmental Protection Agency, during Jackson’s visit to Los Angeles.

At the three-day Governors’ Global Climate Summit, in front of a crowd of more than 2,000 international attendees, Jackson praised Jakpor for her work on behalf of clean air initiatives, including volunteering for the American Lung Association.

“I’ve learned a lot about how science can impact regular people and regular communities, and this summer I learned about importance of community outreach,” Jakpor said.

“When people have information, they can use it to make a difference.”

Mentoring such a young person with a real passion for environmental health issues has been inspiring, said Andrea Hricko, associate professor of preventive medicine at the Keck School and director of community outreach at the SCEHSC.

“We have been discussing creative methods of career development in our center. How do you get someone to think about becoming a Ph.D. epidemiologist or an M.D. interested in environmental health research? How do you get young people excited about this important field?” Hricko said. “Working with a dynamic, intelligent student like Otana, who is only 15, is perfect.”

Jakpor has become accustomed to being singled out for her unusual combination of youth and expertise. Her interest in environmental health began several years ago as she watched her mother struggle with chronic asthma. She began attending scientific meetings and conferences, and has received awards from the Discovery Channel and the National Association for the Advancement of Colored People. She was honored by the Environmental Protection Agency with a 2007 President’s Environmental Youth Award and has also earned recognition from members of Congress and former President George Bush.

“At these presentations, I talk about what’s important to me as a young person,” Jakpor said. “I don’t say anything novel, but people pay attention when a young person says something about these environmental health issues.”

Rob McConnell, professor of preventive medicine at the Keck School and deputy director of the USC/UCLA Children’s Environmental Health Center, approached Jakpor after seeing her poster presentation at a May 2009 meeting of the American Thoracic Society meeting.

“It was immediately clear to me that Otana was a student we wanted to nurture and whose interests we wanted to pursue,” said McConnell. “I urged her to pursue a summer internship at our USC Center, so that she could put her interests and skills into practice.”

Jakpor said she wants to attend medical school after college and plans to continue advocating for clean air.

Hricko and McConnell noted that they are hoping she will become a future Trojan.

Otana Jakpor leads a training seminar on community demographic mapping for USC faculty and staff.

15-year-old maps a path to cleaner air

By Meghan Lewit
Fifteen-year-old Otana Jakpor’s essay on how she spent her summer vacation

15-year-old maps a path to cleaner air

By Meghan Lewit
Fifteen-year-old Otana Jakpor’s essay on how she spent her summer vacation

15-year-old maps a path to cleaner air

By Meghan Lewit
Fifteen-year-old Otana Jakpor’s essay on how she spent her summer vacation

15-year-old maps a path to cleaner air

By Meghan Lewit
Fifteen-year-old Otana Jakpor’s essay on how she spent her summer vacation

15-year-old maps a path to cleaner air

By Meghan Lewit
Fifteen-year-old Otana Jakpor’s essay on how she spent her summer vacation

15-year-old maps a path to cleaner air

By Meghan Lewit
Fifteen-year-old Otana Jakpor’s essay on how she spent her summer vacation

15-year-old maps a path to cleaner air

By Meghan Lewit
Fifteen-year-old Otana Jakpor’s essay on how she spent her summer vacation

15-year-old maps a path to cleaner air

By Meghan Lewit
Fifteen-year-old Otana Jakpor’s essay on how she spent her summer vacati

15-year-old maps a path to cleaner air

By Meghan Lewit
Fifteen-year-old Otana Jakpor’s essay on how she spent her summer vacation

15-year-old maps a path to cleaner air

By Meghan Lewit
Fifteen-year-old Otana Jakpor’s essay on how she spent her summer vacation

15-year-old maps a path to cleaner air

By Meghan Lewit
Fifteen-year-old Otana Jakpor’s essay on how she spent her summer vacation

15-year-old maps a path to cleaner air

By Meghan Lewit
Fifteen-year-old Otana Jakpor’s essay on how she spent her summer vacation

15-year-old maps a path to cleaner air

By Meghan Lewit
Fifteen-year-old Otana Jakpor’s essay on how she spent her summer vacation

15-year-old maps a path to cleaner air

By Meghan Lewit
Fifteen-year-old Otana Jakpor’s essay on how she spent her summer vacation

15-year-old maps a path to cleaner air

By Meghan Lewit
Fifteen-year-old Otana Jakpor’s essay on how she spent her summer vacation

15-year-old maps a path to cleaner air

By Meghan Lewit
Fifteen-year-old Otana Jakpor’s essay on how she spent her summer vacation

15-year-old maps a path to cleaner air

By Meghan Lewit
Fifteen-year-old Otana Jakpor’s essay on how she spent her summer vacation

15-year-old maps a path to cleaner air

By Meghan Lewit
Fifteen-year-old Otana Jakpor’s essay on how she spent her summer vacation

15-year-old maps a path to cleaner air

By Meghan Lewit
Fifteen-year-old Otana Jakpor’s essay on how she spent her summer vacation