Lancet Commission Reviews Respiratory Impacts of Household Air Pollution

Household air pollution (HAP) from solid fuel use in low and middle income countries accounts for 3.5 to 4 million deaths worldwide every year and is regarded as the third leading risk factor for death and disability in the world and the leading environmental risk factor. This global burden of disease is considered preventable with cleaner household fuels, better-ventilated cooking stoves, and greater health awareness, reports a new study by The Lancet Respiratory Medicine Commission co-authored by John Balmes and Michael Bates from COEH.

Despite continuing evidence of the damaging health effects of HAP, 3 billion people — nearly half of the world’s population — rely on solid fuels for cooking and heating. Spending hours near open fires or poorly ventilated stoves, women and children in developing nations are the most vulnerable to HAP. Still, people of all ages — from early life through adulthood — face the respiratory risks of HAP on a daily basis, the Commission’s analyses confirm.

The review, published in the October 2014 issue of The Lancet Respiratory Medicine, brought together a diverse group of international experts to synthesize current knowledge on the associations between HAP and respiratory health. The resulting paper provides a valuable resource for policy makers and investigators engaged in the field.

The Commission’s underlying message — that people need clean air for good health — acknowledges that clean air is not a reality for many of the world’s poor. Yet with the recent strong international interest in HAP interventions, such as the Global Alliance for Clean Cookstoves launched in 2010 by former United States Secretary of State Hillary Clinton, the Commission’s recommendations are well timed to increase government awareness of a global health problem.

The authors reviewed evidence associating HAP exposure with the risk of acute and chronic respiratory diseases. Epidemiological studies have linked HAP exposure to higher rates of acute respiratory infection, the leading cause of morbidity and mortality for children less than 3 years. Most of that burden continues to page 3
As we embark on a new year, it is important to reflect on our most important tasks, not just as individuals, but as a society. Reviewing the contents of Bridges brings to mind two key issues that need our collective work, both locally and globally.

Readers of Bridges know that we have run a number of articles about the global public health problem of household air pollution (HAP), but this is because HAP is the most important environmental factor (and third most important short-lived climate-forcing agent). Interventions to improve the efficiency of combustion of these fuels, or eliminate such combustion altogether, would mitigate climate change in addition to their impact on public health.

California Governor Jerry Brown’s recent inaugural address (http://www.gov.ca.gov/news.php?id=18828) highlights another important problem for which we know enough in 2015 to take action. The Governor quoted the eminent biologist, Edmund O. Wilson, as follows: “Surely one moral precept we can agree on is to stop destroying our birthplace, the only home human beings will ever have. The evidence for climate warming, with industrial pollution as the principal cause, is now overwhelming.” Governor Brown took the opportunity to point out that California has “the most integrated policy to deal with climate change of any political jurisdiction in the Western Hemisphere.” He noted that our state leads the nation in energy efficiency, cleaner cars and energy storage, and our cap-and-trade system has put a price on carbon emissions.

Although California may lead the nation in adopting policies to mitigate climate change, Governor Brown acknowledged that much more needs to be done if we are to prevent a climate disaster by limiting global warming to 2°C — a so-called climate tipping point — by the year 2050. He went on to propose three ambitious goals to achieve these goals is admittedly a tall order. The Governor listed a wide range of initiatives, including more distributed power, expanded rooftop solar, electric vehicles, and policies to reduce HAP and the risk of respiratory disease. Even after new technologies are introduced, households often use solid fuels, alongside traditional cooking methods, a behavior termed “stove stacking.” The Commission, therefore, calls for a wide range of public health intervention strategies to reduce HAP and the risk of respiratory disease.

Lancet Commission Reviews Respiratory Impacts of Household Air Pollution

Continuing from page 1

The risk of individuals developing the full chronic obstructive pulmonary disease (COPD) from HAP exposure is approximately double that of those with exposure, according to the review, and in communities with low rates of tobacco smoking, exposure to solid fuel smoke is probably the leading cause of COPD.

Reduction of emissions at source is the most effective intervention, the authors argue. But even with strong evidence of the harmful effects of HAP, they realistically expect only gradual changes. This is the case in low to middle income countries.

Thompson Receives Grant Aimed at Reducing Household Air Pollution in Guatemala

Grand Challenges Canada awarded COEH faculty Lisa Thompson a “Stars in Global Health” grant. Funded by the Government of Canada, the grant will deliver affordable gas stoves and household health education to low income families exposed to toxic levels of household air pollution (HAP). Thompson is an associate professor in the UCSC Department of Family Health Care Nursing.

The pilot study will train women entrepreneurs to sell liquid petroleum gas (LPG) stoves and provide education to families with a goal to reduce their exposure to HAP. The pilot will test whether a market-based model, supported by education, will lead to the adoption, uptake, and sustained use of LPG stoves.

See the video: http://www.grandchallenges.ca/grantees-stars/6515-01-10/

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John R. Balmes

Co-author John Balmes is director of the UC Berkeley-UCSF Joint Medical Program. Within the UC solar, micro-grid, health Impact market, improved battery storage, and increased information technology and electric power distribution, and many more advanced clean vehicle technologies. The goals can only be achieved in concert with the collaborative and comprehensive efforts of multiple stakeholders, including scientists, engineers, clean energy entrepreneurs, businesses with strategic vision, policy makers at all jurisdictional levels and, above all, a public that is educated about the dangers and challenges of climate change.

The problems of HAP and climate change are actually tied together. Black carbon generated from solid fuel and kerosene combustion is an important short-lived climate-forcing agent. Interventions to improve the efficiency of combustion of these fuels, or eliminate such combustion altogether, would mitigate climate change in addition to their impact on public health.

Important Spring 2015 COEH Dates:

February 27 - STEER’s Environmental Health Summer Internship student applications due. Visit: http://steer.berkeley.edu

March 6 - M. Donald Whorton Writing Award applications due. Visit: http://coeh.berkeley.edu

March 12-14 - UCSC Continuing Medical Education program sponsored by Cardiocare’s Health and Environmental Health: Occupational and Environmental Medicine. Visit: http://tinyurl.com/peyva5x

March 13 - Suzanne Llewellyn COEH Student Project Award applications due. Visit: http://coeh.berkeley.edu


May 22 - COEH Get Together

May 22 - 2015 Lela Morris COEH Symposium

Lancet Commission Reviews Respiratory Impacts of Household Air Pollution

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of disease occurs in countries where households commonly use solid fuels, the authors note.

From a public health perspective, the clear possible sources of HAP should be scaled-up wherever possible. At the same time, it is likely that penetration of such energy technologies to the rural areas of relatively poor countries in sub-Saharan Africa will take decades. In this context, until clean energy is universally available, it is hoped that even modest interventions, such as advanced, extremely low-emission biomass stoves or solar-powered LED lighting, may decrease exposure to HAP sufficiently to reduce the risk for adverse, respiratory, and cardiovascular outcomes. While certainly more data are needed about exposure-response relationships and effectiveness to design better interventions, Professor John R. Balmes in 2015 to act now to promote education and policy initiatives that directly impact the problem of HAP.
The development of hand gestures for computer input is in its early stages, but a study by scientists from the University of California may influence how we will one-day interact with our screens with just hand gestures.

For the study, Rempel and his colleagues classified each hand posture involved in performing a sign. Letters of the alphabet, numbers, and common hand gestures were then assigned to one of the 64 possible hand postures.

Rempel, director of the University of California Ergonomics Program, published the study with co-authors Matt Camilleri, a former post-doctoral fellow in Ergonomics now with Synaptics as a senior usability research designer, and David L. Lee, a former research scientist with UC Berkeley now employed by Apple Inc. as a product design engineer.

Read the study: http://www.sciencedirect.com/science/article/pii/S175819141400706

Most liquid soap in the United States contains the anti-fungal and anti-bacterial agent triclosan. It is also found in thousands of personal care products such as cosmetics, deodorants and acne creams as well as one leading brand of toothpaste. Triclosan is under review by the U.S. Food and Drug Administration due to insufficient evidence of its safety, the authors report.

Scientists at UCSF, working with the Natural Resources Defense Council—a rotation site for the OEM residents—questioned the long-term risks of low-levels of triclosan exposure following animal studies that have linked triclosan with lower levels of testosterone and thyroid hormone.

In vitro experimental data also suggest triclosan may potentially have endocrine disrupting effects.

The study recruited two groups of 38 health care workers from two hospitals—one using antibacterial soap containing 0.3 percent triclosan and the other using plain soap and water. Participants completed a questionnaire to determine additional exposures to triclosan outside of work.

Urine samples showed the geometric mean total urine triclosan was 92.92 ng/mL for the exposed group and 36.65 ng/mL for the unexposed group. In the hospital that had previously phased out antibacterial soap, use of triclosan-containing toothpaste was the main contributor to the participants’ triclosan levels.

To a certain degree, the use of triclosan toothpaste obscured the real difference between the two groups. When the levels were reviewed in the non-toothpaste using groups, the median triclosan level was 68.5 ng/mL in the exposed hospital vs. 8.6 ng/mL in the unexposed.

People already perform simple computer tasks with a tap or swipe of a finger on a tablet or smart phone. And gaming systems like X-box and Wii could replace much of today’s keyboard input. A study by scientists from the University of California may influence how we will one-day interact with our screens with just hand gestures.

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Profile: UCSF OEM Fellow Latifat Apatira

For Latifat Apatira, the inspiration to pursue medicine arrived in a UC Berkeley classroom. She had been fascinated by the natural sciences for as long as she could remember. An Integrative Biology undergrad, she was impressed by Tom Carlson, an “amazing lecturer” who happened to be a practicing physician. A light bulb went off for Latifat. “Okay, I’ll follow in his footsteps. I’m going to become a doctor,” she decided. “And that’s how I ended up a med student at UCSF.”

During her third year at UCSF, she began to look for ways to integrate her two passions: medicine and the environment. “Randomly, I googled the words environment, medicine, and UCSF. The first site that popped up was a profile of a UCSF professor named Gina Solomon.”

She sent Solomon an e-mail. “To my joy, she immediately responded and invited me out to dinner. The rest is history. She took a personal interest in helping me develop as a clinician, as well as a practitioner of environmental medicine and public health, and she introduced me to many influential researchers in the field.”

Apatira worked for Solomon for several months during her fourth year of medical school on a Dengue fever project. “It’s a zoonotic disease that’s tropical, but it has been encroaching into northern latitudes due to climate change.” During that time, Solomon became a great friend and mentor.

After med school, Apatira began a joint internal and preventive medicine residency at Kaiser Permanente and returned to UC Berkeley for a Master’s Degree in Public Health in Environmental Health Sciences.

“This past June, when the opportunity to do further training in occupational and environmental medicine arose, I jumped on it,” says Apatira. The diversity of occupational and environmental health medicine suits Apatira. “I have a lot of interests and like new projects from time-to-time.” She recently worked for the National Institute of Environmental Health Sciences on an initiative called, “Exercise as a Vital Sign.” It encourages healthcare providers to talk to their patients about physical activity much like blood pressure, heart rate, and temperature.

“Currently, Apatira’s research explores how the built environment influences physical inactivity. “My time in primary care internal medicine taught me that lecturing people on behavior change doesn’t work. It doesn’t work on me, and it’s not going to work on anybody else,” says Apatira. “A more powerful upstream approach is to change the physical environment in which we all live.”

Since people are spending more and more time at work, Apatira stresses the importance of seamlessly incorporating concepts of physical activity back into our work routine. “I think this has the potential to change the trajectory of many chronic diseases we’re seeing due to physical inactivity.”

Apatira continued, “This is particularly important in the workplace where sedentary behavior is increasing as people are spending more and more time at work, and it’s not going to work on anybody else.”

Teams of two students are placed with a union or worker organization to investigate job-related health and safety problems among workers, often employed in an under-served or a high hazard job. Projects are designed to maximize interaction between workers and students. OHIP is an applied research experience where students learn about the occupational safety and health field from the workers’ perspective. Project work emphasizes worker interviews and work site evaluations. At the end of the project, teams provide a “give back” product to the workers and their host union/worker organization, present their project at a national NIOSH video conference, and produce a final report. Commitment is full-time, including possible evenings or weekends.

Compensation
Undergraduate Students = $4,000 stipend
Graduate Students = $5,200 stipend

For eligibility information, on-line application and program details go to http://www.aoec.org/ohip.
Ten undergraduates spent the summer of 2014 as paid interns with the STEER (Short Term Educational Experiences for Research) Program—a lucky break for students who had a chance to train alongside some of the world’s leading experts in the field of Environmental Health Sciences.

Interns carried out short research projects and participated in a series of inter-disciplinary seminars covering many aspects of public health research including toxicology, epidemiology, exposure assessment, ergonomics, and geospatial analysis.

STEER Interns Learn First-hand from UC Berkeley Mentors

Each year, interns choose to work with one of over 20 academic mentors. Undergraduates and graduate students can participate in the STEER program if they have completed at least one year at an accredited school or university (including baccalaureate schools of nursing) and are in good academic standing. The program is funded each year through a grant from the National Institute of Environmental Health Sciences. COEH provides substantial additional support, which helps to make the STEER Program so successful.

Co-directors of the STEER program are Adjunct Professor of Epidemiology Michael Bates and Assistant Researcher Sadie Costello, both from UC Berkeley’s School of Public Health.

For more information on 2013 STEER internships visit: http://steer.berkeley.edu.

This past summer, Jawad Hoballah from Harvard and Elizabeth Avina from UC Berkeley worked for mentors Katherine Hammond and Elizabeth Neth on the new Children’s Health and Air Pollution Center (CHAPS) study investigating the risks of air pollution exposure to children’s health in the San Joaquin Valley, California.

“Being a mentor for STEER interns is an especially rewarding experience, especially with the two outstanding interns I had this summer,” said COEH faculty Katherine Hammond.

“After learning about our research on the health effects of air pollution on children in Fresno, her home town, Elizabeth Avina developed a research project to investigate how accurately the air pollution flag program—based on monitoring at a few sites, predicted the air pollutants we had measured at the schools,” explains Hammond. “She generated a great deal of interest when she presented her results to the Community Advisory Board for our study, CHAPS, and NPR picked up the story.”

Hammond added, “Jawad Hoballah hadn’t expected to be getting his detective badge while working in our chemistry laboratory, but when the analyses for the toxic air pollutants (volatile and semi-volatile hydrocarbons) suddenly stopped working, he accepted the challenge enthusiastically and solved an incredibly complex problem just in time to analyze the indoor air samples collected in Nepal from kerosene, wood and straw cooking stoves, kerosene lanterns, and candles. He clearly has the energy and persistence, not to mention intelligence, to be a successful researcher.”

Intern Tashnia Hossain from UC Berkeley learned how discoveries in the lab help us understand the health impacts of hazardous chemicals. Working with her mentor, Nina Holland, she participated in a project analyzing the effects of PONI-108 polytetrahydrofuran on development.

Interns Tenerelli and Jessica Coleman worked on separate projects under the direction of mentors Brenda Eskenazi and Daniel Madrigal from the Center for Environmental Research and Children’s Health. Coleman, from San Diego State University, joined a community-based participatory research project focusing on youth empowerment. Tenenelli, at UC Berkeley student, conducted literature reviews for a National Institutes of Health grant application.

This is the sixth class of interns since the program’s inception in 2008. Each year, interns choose to work with one of over 20 academic mentors. Undergraduates and graduate students can participate in the STEER program if they have completed at least one year at an accredited school or university (including baccalaureate schools of nursing) and are in good academic standing. The program is funded each year through a grant from the National Institute of Environmental Health Sciences. COEH provides substantial additional support, which helps to make the STEER Program so successful.

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Students Reflect on their Internship with STEER

“STEER helped me solidify what I want to do after college.”

“This was my first time participating in research. Now that I have experienced what it’s like, I feel empowered to answer scientific questions that may arise during my future career.”

“I want to do more public health outreach.”

“It definitely helped me think about my future.”

“The program gave me excellent skill sets to add to my resume and experience with the academic community I hope to join.”

A dedicated group of 34 students took a pass on summer vacation to take part in the Occupational Health Internship Program (OHIP). Interns Elana Kessler and Michelle Gonzales worked on a project with the Community Advisory Board for our Health Program—that benefits workers by improving health and safety conditions for workers exposed to toxic substances. Their results revealed that bus operators have to make frequent changes to scheduling to get adequate restroom facilities, nor do they often get a chance to use the restroom due to tight scheduling.

Their survey showed almost 75% of operators drink liquor to avoid having to use a restroom on their shift.

Additionally, more than 15% of respondents used a cup or bottle to relieve themselves due to a lack of public restrooms on route.

Kessler and Gonzales produced a flyer to build public awareness about the poor quality and lack of restroom access for Bay Area drivers and to promote changes to scheduling to better accommodate restroom breaks and to promote changes to the job. ATU Local 192 plans to use the results of the survey as a future bargaining tool to improve health and safety conditions for members.

Other local projects looked at ways to improve health and safety for workers exposed to toxic paint removers and health and safety issues in the food processing industry.

A still from the video about the ergonomic drill by Gabriel Fregoso and Adam Moskowitz.

A dedicated group of 34 students took a pass on summer vacation to take part in the Occupational Health Internship Program (OHIP). After conducting focus groups and worker interviews, Kessler and Gonzales developed a 45 question survey and found that close to 100 union members. Thirty-three percent said that “bus operators do not have access to private restrooms, but the worst restroom facilities, nor do they often get a chance to use the restroom due to tight scheduling.”

To learn more about OHIP, visit: http://aoec.org/ohip

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COEH BRIDGES | WINTER 2015

NO PUBLIC RESTROOM

Early drafts of the outreach video underwent two rounds of evaluation with occupational health professionals before it premiered on August 12 at the Laborer’s Training Center in San Ramon, California.

Interns Elana Kessler and Michelle Gonzales worked on a project with

2014 OHIP Interns Explore Careers in Occupational Health

Eleven undergraduates spent the summer of 2014 as paid interns with the STEER (Short Term Educational Experiences for Research) Program—a lucky break for students who had a chance to train alongside some of the world’s leading experts in the field of Environmental Health Sciences.

Interns carried out short research projects and participated in a series of inter-disciplinary seminars covering many aspects of public health research including toxicology, epidemiology, exposure assessment, ergonomics, and geospatial analysis.

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Commemorating 30th Year of the Union Carbide Disaster in Bhopal

To commemorate the 30th year of the 1984 Union Carbide Gas Disaster in Bhopal, India, UCSF Occupational and Environmental Medicine gradu- ate Dr. Jayshree Chander launched “We All Live in Bhopal,” a series of events throughout December 1-8, 2014, organized by Beyond Holistic, founded by Chander. The activities followed educational presentations at local universities, high schools, and med- ical centers during the fall of 2014.

Chander was particularly impressed by the students at Kennedy High School in Richmond who appeared moved by the presentation made more real by memories of the Chevron Refinery fire in August 2012, which sent 15,000 residents to the hospital in seek of medical care. Chander first began raising public awareness about the Union Carbide gas disaster after spending nearly a year volunteering in a clinic that served the survivors. Three decades past disaster, Chander still fears for the people of Bhopal who remain exposed to toxic chemicals lingering in the contaminated water and soil near the abandoned factory.

The Union Carbide Disaster in Bhopal is widely considered the world’s worst industrial accident. On the night between December 2nd and 3rd, 1984, around midnight, a gas leak at the American-owned pesticide manufacturing facility outside of Bhopal killed up to 10,000 in the first three days, and 22,000 in total, reports Amnesty International.

The disaster took place a long time ago, in a place far away, making it easy to write-off Bhopal, argues Chander. Yet “we all live in Bhopal,” she points out, because of the real potential for industrial accidents in our own backyard.

“A catastrophe similar to the Union Carbide disaster could happen in the Bay Area or elsewhere in the United States unless the federal government introduces enforceable regulations to make chemical facilities safer.”

“Restoring justice in Bhopal is a preventive measure to ensure our own safety as corporations all over the world follow how the ongo- ing disaster in Bhopal is handled,” adds Chander, a Bay Area physician trained in Family and Community Medicine, as well as Occupational and Environmental Medicine.

For more information on “We All Live in Bhopal,” visit: www.walib.org.

View Dr. Chander’s presentation:
http://www.youtube.com/watch?v=NaP0uQ8PKCU

The 2015 COEH MCDONALD WHORTON WRITING AWARD

Students and recent alumni (within 5 years of graduation) from any of the COEH-affiliated programs are eligible to submit a manuscript for consideration. Papers must be co-authored; however the student/alumni must be first or senior author. Papers must be recently published or accepted for publication.

The Award $500.00 Plus recognition in the COEH Bridges newsletter and an invitation to present at a COEH event.

Due Date Extended! March 6, 2015

Learn more at http://coeh.berkeley.edu/students/WhortonAward.html

The resulting task force is co-chaired by former COEH faculty member Gina Solomon, now deputy secretary for science and health at the California Environmental Protection Agency. It includes 22 state, federal, and local agencies, including the Department of Industrial Relations (DIR) and Cal/ OSHA. In her role, Solomon is charged with helping to ensure that Cal/OSHA’s Process Safety Management (PSM) reg- ulations and the California Accidental Release Plan regulations under the Governor’s Office of Emergency Services are revised according to the recommendations of the Interagency Working Group report.

Now, the DIR Division of Occupational Safety and Health has released a draft proposal of Process Safety Management (PSM) regulations that propose significant changes to increase oversight, policy, and enforcement as part of California’s multi-agency effort to improve refinery safety.

Juliann Sum, chief of Cal/OSHA, and Director of Health and Safety, was strongly encour- aged to provide input on the proposed Total Worker Health™

The Drive Toward Total Worker Health™

The National Institute for Occupational Safety and Health (NIOSH) and Centers for Disease Control and Prevention (CDC) sponsored the 1st International Symposium to Advance Total Worker Health (TWH™) on October 6-8, 2014, at the National Institutes of Health in Bethesda, Maryland. The symposium brought together a wide range of examples of what it could mean to integrate occupational safety and health promotion with health promotion in the workplace to both prevent workplace injuries and illness and to advance worker health and well being over all. Attendees were encouraged to provide input on the proposed Total Worker Health Agenda.

Rabkin Baker, COEH director of r2p, represented COEH at the sym- posium and was a presenter at the Postsymposium Workshop: Adoption, Implementation and Dissemination of Worksite-Based Interventions: Lessons Learned and Applications for Improving Worker and Workplace Health. Baker said, “It was really very interesting to continue to page 12
Nurse to Patient Ratio Law Improves Health and Safety

California legislation mandating minimum nurse-to-patient ratios reduced occupational injury and illness rates for both registered nurses (RN) and licensed practical nurses (LPN) by up to 33 percent compared to the expected rate without the law, finds a new study from UC Davis.

The investigation, funded by the National Institute for Occupational Safety and Health (NIOSH), used data from the California Department of Public Health and published in the International Archives of Occupational and Environmental Health, is thought to be the first to demonstrate how the law has improved the health of California nurses.

In California, rates dropped by 31.6 percent for hospital RNs and 33.6 percent for hospital LVNs. These results are in line with the downward trend in occupational illness and injury rates nationally, the authors report. The study analyzed data from the U.S. Bureau of Labor Statistics Survey of Occupational Injuries and Illnesses (SOII) and the California Employment Development Department’s data for the SOII for the years 1994 through 2010.

The nurse-patient ratios that went into effect in 2004 led to rapid, meaningful changes in nurse to patient ratios, note the authors, although the original intent of the law was to improve patient health outcomes and made no mention of nurse safety.

California still remains the only state with mandated minimum nurse-to-patient ratios, which vary depending on the medical facility and the type of health care provided. “These findings should contribute to the national debate about enacting similar laws in other states,” said Leight, a professor of Health Economics in the School of Medicine and an investigator with the UC Davis Center for Healthcare Policy and Research.

Study co-authors include Patrick Romano of the UC Davis Center for Healthcare Policy and Research and the Department of Internal Medicine, Ana-Maria Iosif of the Department of Public Health Sciences, and Carrie Markis, who earned her master’s degree from the Betty Irene Moore School of Nursing.

Read the paper: http://link.springer.com/article/10.1007%2Fs00420-014-0977-y

View the UC Davis press release: http://www.ucdmc.ucdavis.edu/publish/news/newsroom/9280

Schwarzman Appointed to Biomonitoring California's Scientific Guidance Panel

California Assembly Speaker Toni Atkins appointed COEH Research Scientist Megan Schwarzman to serve on the Scientific Guidance Panel for the California Environmental Contaminant Biomonitoring Program, also known as Biomonitoring California.

The program – the only of its kind conducted by a U.S. state – aims to determine levels of synthetic chemicals and pollutants in Californians, establishing trends in the levels of these chemicals over time and investigating the effectiveness of public health interventions.

The nine member panel meets quarterly to provide scientific peer review for the program, including advising on its design and implementation and recommending chemicals for biomonitoring in the state.

Schwarzman is co-director and principal investigator of the Breast Cancer and Chemicals Policy Project and a founding director of the Berkeley Center for Green Chemistry.

For more on the panel see http://www.biomonitoring.ca.gov/scientific-guidance-panel

Hirsh Accepts Soaring Star Award on Behalf of the AIHA International Affairs Committee

The American Industrial Hygiene Association (AIHA) presented COEH Advisory Committee member and UC Berkeley alumnus Richard Hirsh, CIH, MPH, with the Soaring Star Award at its annual AIHC conference held from May 31 to June 5 in San Antonio, Texas.

The Soaring Star Award recognizes a volunteer group that has shown continued excellence for at least the past two years. Hirsh accepted the award on behalf of the AIHA’s International Affairs Committee (IAC). The goal of IAC is to engage, educate, and support international members of the AIHA.

California is the only state with mandated minimum nurse-to-patient ratios.
**ANNOUNCEMENTS**

**Climate Change 2014: Impacts, Adaptation, and Vulnerability**

In October 2014, the Intergovernmental Panel on Climate Change (IPCC) launched the full version of its final report, “Climate Change 2014: Impacts, Adaptation, and Vulnerability” (WGII). The culmination of years of effort by the world’s leading experts in the field, the report offers the most comprehensive look to date at the widespread impacts and risks of climate change and the potential for co-benefits and adaptation. COEH faculty Kirk Smith was one of two coordinating lead authors of the health impacts chapter.

In total, 242 lead authors and 66 review editors contributed to the WGII report. Lead authors invited an additional 436 experts to be contributing authors. The final content released online includes a summary for policymakers, four working group reports, a summary for decision makers, a summary for the public, and a technical summary. 30 downloadable assessment chapters, and more.

Consistent with the IPCC’s commitment to transparency, it also released early draft chapter versions, thousands of searchable reviewer comments on drafts, and author responses to reviewer comments.

**New Book Addresses Disparities Facing Global Migrant Populations**

Marc Schenker is the director of the UC Berkeley School of Public Health and the Western Center for Agricultural Health and Safety. He is a distinguished professor with appointments in the Departments of Health Sciences and Medicine at UC Davis, and the associate vice provost for Outreach and Engagement.

Co-authors of the handbook include Xochitl Castañeda, the director of the Health Initiative of the Americas at the UC Berkeley School of Public Health and Alfonso Rodríguez-Lainz, a senior fellow at the Center for Disease Control and Prevention, Division of Global Migration.

**Hirsh Accepts Soaring Star Award on Behalf of the AIHA International Affairs Committee**

Dr. Paul Blanc is the director of the International Task Force for Environmental Medicine (ITFEM). The IAC is to build industrial hygiene capacity throughout the world by providing a focal point for professional development, technical support, and education.

Key initiatives supported by the IAC over the past year include:

- Workplace Health Without Borders (WHWB), a newly formed network of industrial hygiene professionals similar to Doctors Without Borders;
- The Developing World Outreach Initiative (DWOI), focused on occupational health and safety (OHS) technical and training projects in Asia and Africa;
- The Occupational Health Training Association (OHTA), which develops and translates OHS training materials into multiple languages; and
- The International Task Force for Children’s Environmental Health (ITFCEH) – a global project team that addresses the assessment and control strategy for preventing lead exposure near abandoned heavy metal contaminated waste sites.

**IN THE MEDIA**

The **San Francisco Chronicle** reported on the dangers of environmental toxins, especially during pregnancy. The article, “Preparing for baby? Here are the toxins to avoid,” was published on August 2, 2014.

**Paul Blanc Named Chief of Multi-site OEM Division**

UCSF and the San Francisco Veterans Administration Medical Center (SFVAMC) appointed COEH faculty Dr. Paul Blanc, chief of a newly integrated multi-campus Division of Occupational and Environmental Medicine (OEM) in the Department of Medicine. The OEM Division headed by Dr. Blanc now spans three medical sites at UCSF, Parnassus, and the SFVAMC. The appointment became effective January 1, 2015.

Dr. Blanc’s new responsibilities include further developing UCSF’s internationally recognized program in occupational and environmental health. His mandate consists of developing research capacity at the SFVAMC, subsuming military exposures in their environmental context, as well as working with existing programs such as the Human Exposure Laboratory at SFVAMC led by Dr. John Balmes and the Ergonomics program at the Richmond Field Station established by Dr. David Rempel.

Together with Dr. Robert Harrison (Associate Program Director), Dr. Blanc also leads the UCSC OEM Residency, which will have one of its largest incoming groups this coming July with seven trainees in the program.

In addition to numerous peer-reviewed publications, in 2009, Blanc authored a revised edition of “How Everyday Products Make People Sick, Toxins at Home and in the Workplace” (University of California Press). The book offers a deeply researched and historical account of the risks posed by household toxins such as leaded toys, fire retardants in furniture and clothing, and bathroom bleaches, among others.

Recently, Dr. Blanc’s popular blog, “Hazardous Hazards, hosted by Psychology Today, discussed the hazards of triclosan, a potential hormone disrupting chemical found in thousands of household products including cosmetics, cavity-fighting toothpaste, and acne creams. The blog expanded on a pioneering study published in the Journal of Occupational and Environmental Medicine co-authored by Dr. Blanc and led by UCSF OEM graduate Julia K. MacIasac.

**Cardiovascular Health and Disease: Occupational and Environmental Factors and Updates in Occupational and Environmental Medicine**

On March 12-14, 2015, Dr. Blanc was a co-chair of a UCSF Continuing Medical Education program held at the Holiday Inn Fisherman’s Wharf in San Francisco, California titled, “Cardiovascular Health and Disease: Occupational and Environmental Factors and Updates in Occupational Health and Environmental Medicine.” For information or to register, visit: http://tinyurl.com/peyva5x.

**IN THE MEDIA**

The **San Francisco Chronicle** reported on the dangers of environmental toxins, especially during pregnancy. The article, “Preparing for baby? Here are the toxins to avoid,” was published on August 2, 2014.

**John Balmes** commented on the drop in cancer risk from air pollution in Southern California in an article appearing on October 2, 2014. He was quoted again in **tak naprawd.** The positive finding came from a study conducted by the South Coast Air Quality Management District.

**Seth Holmes** won the Out for Sustainability Award at the 2014 Out for Sustainability Summit held in August for his book, “Fresh Fruit, Broken Bodies: Migrant Farmworkers in the United States.” Holmes also won the 2014 Margaret Mead Award offered jointly by the American Anthropological Association and the Society for Applied Anthropology and the 2014 Association for Humanist Sociology (AHS) Book Award.

**3News in New Zealand** interviewed COEH faculty Kirk Smith on why individuals must change their lifestyle behaviors to slow population growth and reduce their risks of cancer. The media coverage stemmed from Smith’s plenary talk at the New Zealand Population Health Congress in Auckland. In articles published by nz.co-doctor.co.nz and New Zealand Herald, Smith was quoted on the need to act on climate change to protect current and future health.

A story published in **The Hill** on November 18, 2014, quoted John Blanc supporting the Environmental Protection Agency’s new national ambient air quality standard for ozone.
The design of the workplace, from the level of tools to the overall organization, has a strong influence on the health and well-being of our working population. This half day conference will explore key factors in the design of work that can improve safety, health, and productivity. The talks will be practical and will include real-world case studies and will be followed by moderated panel discussions.

SAVE THE DATE: FRIDAY, MAY 22, 2015, 1 PM - 5 PM

LOCATION: DAVID BROWER CENTER, BERKELEY, CA

SPONSORED BY:

ABOUT COEH

The Northern California Center for Occupational and Environmental Health (COEH), a multidisciplinary program of the University of California at Berkeley, Davis, and San Francisco, promotes health and safety in workplaces and communities by:

- Educating health professionals in epidemiology, ergonomics, industrial hygiene, medicine, nursing, toxicology, and related fields to be leaders in occupational and environmental health.
- Developing new knowledge through an interdisciplinary research agenda focused on preventing illness and injury.
- Responding to the needs of people affected by hazards in their workplaces or communities, with special attention to vulnerable populations.

Through these activities COEH supports federal, state, and local agencies, health and safety professionals, industry, labor, and community-based organizations in their efforts to prevent occupational and environmental disease and injury.

COEH is an Education and Research Center (ERC) of the National Institute for Occupational Safety and Health (NIOSH).