

School of Public Health and Community Medicine . University of Washington . Winter 200

# 60TH ANNIVERSARY ISSUE

More than 200 alumni and friends gathered March 6 to celebrate the 60th anniversary of the Department of Environmental and Occupational Health Sciences. This issue of Environmental Health News takes us down memory lane, and also describes new grants and initiatives as we move forward.

Department of Environmental and Occupational Health Sciences

ENVIRONMENTAL HEALTH

#### INSIDE

60th Anniversary	1
Event Photos	2
The Jack Hatlen Scholarship Fund	3
Then & Now	3
Our Department's History	Ļ
Challenging the Immune system	5
Discover Grant	5
Exposure Assessment	6
Continuing Education & Events	7
Conference Presentations	8
People & Places	10
Student Research Day	12

## 6 DECADES OF ENVIRONMENTAL HEALTH

Jack Hatlen's career mirrors our department's history. He entered with the first undergraduate class in 1947. A few years after graduating, he returned and spent more than 45 years on our faculty. At 82, Hatlen is long since retired, but still maintains an office in our Roosevelt building as associate professor emeritus.

Hatlen, and the scholarship recently named for him (see page 3), were honored at our department's 60th anniversary celebration on March 6. As the chart on page 3 shows, our department has come a long way since its origins.

Initially, the curriculum consisted of courses in food and milk sanitation, industrial hygiene, vector control, and impacts of biological agents on human health. The students were undergraduates, though some classes were directed at medical students.

In 1957, the Bachelor's program in Sanitary Science was restructured and renamed Environmental Health. It offered two tracks, one for sanitarians and one for students who wanted to go on to graduate school.

In 1970, our department became part of the new School of Public Health and Community Medicine. The first dean, Tom Grayston, recalls a decade of rapid growth, especially in the graduate program.

Through the 1980s, our department grew to meet the needs of expanding graduate and research programs in occupational medicine, toxicology, industrial hygiene, and environmental health. The undergraduate program was restructured in the early 2000s around four interest areas—medical professions, biological sciences, physical sciences, and environmental health practices.

Our department changed its name again in 2003, becoming the Department of Environmental and Occupational Health Sciences. Recently, major grants have put us in the forefront of air pollution and child health research.

See photos of the anniversary event on page 2 and at *http://depts.washington.edu/envhlth/about/anniversary.php*.



top row, l to r: Event sponsor Bruce Kelman talking to Dave Eaton; Laura Denovan (MS 1996) and her dad, James (BA/BS 1965); Jack Hatlen, Dave Eaton, Dave Kalman middle row, l to r: Keynote speaker Tom Grayston; seminar speaker Gregg Grunenfelder with Janice Camp and Dave Kalman; Becky Rooney and Sarah Fischer bottom row, l to r: Diane Morgan; James Woods and Donald Malins; Elaine Faustman, Kathryn Shuman, and Sharon Morris



## THE JACK HATLEN SCHOLARSHIP FUND

A scholarship fund has been established in Jack Hatlen's name to support outstanding undergraduates in Environmental Health. The first recipient is Christopher Diangco (BS Environmental Health, BS Biology 2008).

The department is seeking your support to build this fund so we can encourage more students to enter the field. For more information, please visit http:// depts.washington.edu/envhlth/ about/anniversary.php or call 206-616-4177.

#### Yearly Tuition/Fees for Undergraduates

1947	\$95
1957	\$183
1967	\$345
1977	\$564
1987	\$1731
1997	\$3366
2007	\$6384

1947-1948

Photos: UW Libraries Special Collections Neg. #UW20194z, Joel Levin

DEGREES **BS** Sanitary Science

## 2007-2008

- BS Environmental Health (EH)
- MS Toxicology, Exposure Sciences, EH

back: 1948 graduation, front: 2005 graduation

- MPH Environmental and Occupational Health, Occupational and
  - **Environmental Medicine** Toxicology, Environmental and
- PhD Occupational Hygiene

#### DEPARTMENT

Preventive Medicine and Public Health. School of Medicine

#### # STUDENTS

4 undergraduates, 3 of them WWII vets

Environmental and Occupational Health Sciences, School of Public Health and Community Medicine

56 undergraduate majors, more than 300 additional students take introductory EH courses, 74 graduate students

## # FACULTY

Part-time clinical faculty from state agencies

#### CLASSROOMS

Thomson Hall, Hall Health

Health Sciences Center and other buildings across campus

37 regular, 70 auxiliary

Undergraduate students l to r: Li Ming Leung, My Dung (Amy) Nguyen, Christine Santiago, Christopher Diangco, Quynh Bui, with Undergraduate Program Manager James Meadows (standing)

# OUR DEPARTMENT'S HISTORY

#### 194Os

**1947**—Environmental Health division created within UW's new Department of Preventive Medicine

1949-First four graduates in Sanitary Science

**1948**–Construction of Health Sciences Building

#### 195Os

**1951**—Environmental Research Laboratory established to provide industrial hygiene services for industry and air pollution studies for local governments

**1951–**Jack Hatlen (one of first four Sanitary Science graduates) joins faculty

#### 196Os

**1963**—Washington State Legislature funds the Environmental Research Lab to do research, teaching, and service in occupational health

**1966**—F-wing is added to the Health Sciences Center to house our department

**1967**—Environmental Health undergraduate program accredited

## SPHCM HISTORY PROJECT

The School of Public Health and Community Medicine has launched a history project, which includes videotaped interviews of the school's early faculty.

Our department's history has thus far been told by faculty members Pete Breysse, Tom Grayston, Jack Hatlen, Jane Koenig, Gil Omenn, and Gerald van Belle.

A photo archive and a timeline are also part of the project. Blending old and new media, the school's history will eventually be posted online in the open and collaborative tradition of the online encyclopedia Wikipedia.

If you would like to contribute to the history project, please contact Holly Weese, *hweese@u.washington.edu* or 206-685-6643. The archive's website, where you can see the faculty interviews, is *http://sphcm.washington.edu/history/* 

#### 1970s

**1970**–Department of Environmental Health becomes part of new School of Public Health and Community Medicine

**1972**–OSHA Safety and Health Act, Clean Water Act and Clean Air Act enacted

1973-Carl Osaki receives first master's degree

**1977**–NIOSH establishes Northwest Center for Occupational Health & Safety; EH Lab accredited by the American Industrial Hygiene Association

#### 19805

**1980**—Congress passes Superfund law in response to the Love Canal disaster

**1981**—The soulcatcher, a Northwest Indian symbol for physical and spritual well-being, is designed by Marvin Oliver as the logo for the School of Public Health and Community Medicine

**1986**–UW becomes one of four universities to receive a National Institute of Environmental Health Sciences (NIEHS) Superfund Basic Research Grant

**1987**–Occupational and Environmental Medicine Program becomes a hybrid between our department and the Department of Medicine

#### 1990s

**1991**—Gerald van Belle named chair after the untimely death of Sheldon Murphy

1994– Kay Teschke earns first PhD degree

#### 20005

2000–Dave Kalman becomes chair

**2003**–Name changes to Department of Environmental and Occupational Health Sciences

**2007**–Restructuring of Industrial Hygiene and Safety program into Occupational and Environmental Exposure Sciences

We set out to ... become one of the major centers in the country.... It was a long-term vision and a long-term achievement

> -Gil Omenn, former Dean of SPHCM, from a history project interview

# FUTURE RESEARCH DIRECTIONS

## CHALLENGING THE IMMUNE SYSTEM

Is cleanliness next to godliness? Not so, according to Professor Harvey Checkoway, quoted in a recent story in *New Scientist* magazine. Checkoway noted that dairy farmers, who breathe in dust mixed with dried manure and its associated bacteria, are as much as five times less likely to develop lung cancer than nonfarmers.

Epidemiologists have also found that children who attend daycare in their first few months are much less likely to develop leukemia than those who stay at home. Checkoway said immune stimulation by bacteria and viruses may prevent some cancers.

In one of the largest occupational epidemiology cohort studies ever conducted, Checkoway and a research team found that a certain type of bacterial toxin might protect Shanghai textile workers from lung and other cancers.

The lung cancer result may have been strongly influenced by cotton dust and endotoxin exposures. Endotoxins are a particular type of toxin bound to gram negative bacterial cells that are released when the cells are disrupted.

The *New Scientist* piece questions whether the higher incidence of certain cancers in affluent populations—including breast cancer, lymphoma and melanoma—might have something to do with sanitized living. Based on the literature, Checkoway thinks it might.

#### FURTHER READING

Astrakianakis G, Seixas NS, Ray R, Camp JE, Gao DL, Feng Z, Wernli K, Fitzgibbons ED, Thomas DB, Checkoway H. Reduced risk of lung cancer among female textile workers exposed to endotoxin. *J Natl Cancer Inst* 2007; 99(5):357–364.

Marshall, J. Filthy healthy: The cancer hygiene hypothesis. New Scientist, Jan. 12, 2008; 197(2638):34-37. http://www.newscientist.com/channel/ health/mg19726381.700-fighting-cancer-with-filth.html



Kids in daycare may develop healthier immune systems

## DISCOVER GRANT

The National Institute of Environmental Health Sciences (NIEHS) has selected the UW as one of the first three research centers in the United States to define the role of environmental agents in human disease.

The three new centers called DIS-COVER (Disease Investigation through Specialized Clinically Oriented Ventures in Environmental Research) will receive \$6.8 million for the first year of funding to bridge the gap between basic research and clinical diseases caused by the environment.

"The DISCOVER centers will help to define the role of environmental agents in the initiation and progression of human disease and develop new ways to both prevent and treat disease," said Dennis Lang, interim director, NIEHS Division of Extramural Research and Training, as he announced the awards.

Professor Joel Kaufman and colleagues will study the impact of traffic-related air pollution on cardiovascular disease. Specifically, the program will seek to increase understanding of biological pathways related to inflammation and vascular dysfunction from air pollutants and progression of cardiovascular disease.

Eventually, their findings could help prevent cardiovascular disease through educational outreach opportunities to both the medical and public health communities.

The other centers are Johns Hopkins Bloomberg School of Public Health, Baltimore; and Columbia University School of Public Health, New York City.

-Justin Reedy

# E XPOSURE ASSESSMENT

"Environmental Health? We just saw a film clip about you," said the archivist in the University of Washington's Library Special Collections Division. He unearthed two minutes of film, nearly 40 years old, titled "Arson." It showed the Environmental Health Laboratory assisting local fire marshals in determining whether a suspicious fire was deliberately set.

Although the equipment and research techniques have become vastly more sophisticated in the past 40 years, that mission reflects what the laboratory still does today, said Dave Kalman, chair of our department and former lab director.

The old film showed lab staffer Robert Orheim using a gas chromatograph and a Hitachi magnetic sector mass spectrometer, which had the capacity to identify a single mass spectrum at a time. In contrast, Kalman said, a modern instrument collects several thousand spectra automatically, catalogs their masses and compares them with a library of nearly 100,000 reference spectra, all within minutes.

Crude as the 1970s analysis was, it could identify petroleum hydrocarbon residues (or "accelerants" in arson parlance). "The State Fire marshals didn't have a lab so, whenever they suspected arson, they'd bring the samples and we'd see if there was any accelerant in the residue," recalls Senior Lecturer Emeritus Lee Monteith. "In one incident, when a family home burned, the only sample they could get was a teddy bear. The lab analyzed it and, sure enough, it contained gasoline vapors."

Monteith, who joined our department in the mid-1960s, remembers the early days. One milestone was an interdisciplinary study involving the US Forest Service and the UW departments of Forestry and Mechanical Engineering, aimed at reducing air pollution from forest slash burning.

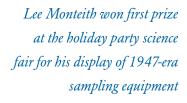
Today, the EH Lab provides both analytical and consultation services for our department's two other service units: the Occupational and Environmental Medicine Clinic and the Field Research and Consultation Group (Field Group).

The lab is often asked to evaluate reaction byproducts from industrial processes and combustion products of workplace materials, said Lab Director Russell Dills. One unusual example was the examination of decades of old records from a company's laboratory to evaluate the probability of benzene exposure.

The lab still has ties with fire departments. It regularly analyzes the canisters of air that firefighters breathe. Recently, the lab helped a fire department determine if a new fire-suppressant additive could harm firefighters.

The sampling was done during a practice drill that involved burning down a house. Dills and Marc Beaudreau of the Field Group built a multi-chemical sampler that firefighters took into a burning room. While the fiery sampling was dramatic, the analysis was the standard industrial hygiene work the lab performs routinely.

-Kris Freeman contributed to this story







# CONTINUING EDUCATION & EVENTS

o confirm this schedule or find more information about these courses, call 206-543-1069 or visit the Continuing Education website at *http://depts.washington.edu/ehce*. Courses are in Seattle unless otherwise noted.

#### PACIFIC NORTHWEST OSHA EDUCATION CENTER

Not for OSHA rules only! All classes offer training that meets WISHA, OR-OSHA, and Alaska state standards, as appropriate.

Mar 31-Apr 3	OSHA 500: Trainer Course for Construction Industry (Portland)
Mar 31-Apr 3	OSHA 500: Trainer Course for Construction Industry (Boise)
Apr 1-3	OSHA 2264: Permit-Required Confined Space Entry
Apr 7-10	OSHA 500: Trainer Course for Construction Industry ( <i>Richland</i> )
Apr 7-10	OSHA 6000: Collateral Duty Course for Other Federal Agencies
Apr 14-17	OSHA 501: Trainer Course in Standards for General Industry ( <i>Portland</i> )
Apr 15-17	OSHA 3010: Excavation, Trenching, and Soil Mechanics
Apr 22-24	OSHA 2225: Respiratory Protection (Portland)
Apr 28-May 1	OSHA 510: Standards for the Construction Industry
May 5-8	OSHA 5600: Disaster Site Worker Train-the-Trainer ( <i>Richland</i> )
May 12-15	OSHA 511: General Industry Standards
May 13-15	OSHA 3010: Excavation, Trenching, and Soil Mechanics ( <i>Anchorage</i> )
May 19-22	OSHA 500: Trainer Course for Construction Industry
May 19-22	OSHA 521: OSHA Guide to Industrial Hygiene (Portland)
Jun 2-5	OSHA 2015: Hazardous Materials
Jun 3-5	OSHA 2250: Principles of Ergonomics (Portland)
Jun 9-12	OSHA 2045: Machinery & Machine Guarding Standards ( <i>Boise</i> )
Jun 9-12	OSHA 501: Trainer Course in Standards for General Industry
Jun 16-19	OSHA 5400: Maritime Train-the-Trainer (Portland)
Jun 17-19	OSHA 3110: Fall Arrest Systems
Jun 24-26	OSHA 3010: Excavation, Trenching, and Soil Mechanics <i>(Portland)</i>

#### NORTHWEST CENTER FOR OCCUPATIONAL HEALTH & SAFETY

- Apr 17 Puget Sound Occupational and Environmental Medicine Grand Rounds: Precarious Employment: Health and Safety for Day Laborers and Other Contingent Workers, Noah Seixas
- Apr 30 Creating a Culture for Safe Patient Handling: The Washington Law and Beyond (*Tacoma*)
- May 13 Chemical Reactivity Hazards: Laboratory Scale Recognition & Control
- May 15 Puget Sound Occupational and Environmental Medicine Grand Rounds: Occupational Hazards in Metal and Glass–The Fine Art of Exposure Assessment, Janice Camp and Gerry Croteau

#### GOVERNOR'S AG SAFETY DAY



Pablo Palmandez (right), agricultural workplace specialist in our Yakima field office, helps an agricultural worker put on gloves as part of a fluorescent tracer demonstration at the Health Fair sponsored by Pacific Northwest Agricultural Safety and Health Center (PNASH)

## CONFERENCE PRESENTATIONS

Departmental researchers or alumni are in bold-faced type.

#### AMERICAN PUBLIC HEALTH ASSOCIATION WASHINGTON, DC NOV. 3-7, 2007

- **Graves JM, Daniell WE,** James F, Milgrom P. Drinking water fluoride concentrations and baseline prevalence of dental fluorosis among elementary school children on San Juan Island, Washington
- **Graves JM**, Milgrom P, Tut OK. Development of a sustainable and prevention-oriented oral health intervention for early childhood programs in the Pacific Islands
- Wickizer TM, Franklin GM, Fulton-Kehoe D, Mootz R, Smith-Weller T. Improving the quality care in workers' compensation through a communitywide intervention: Did the IOM get it right?

Wickizer TM, Franklin GM, Fulton-Kehoe D, Smith-Weller
T, Mootz R. Can quality improvement activities encourage physicians to adopt best practices in the delivery of care?
Evidence from a quality improvement project in Washington State

Janessa Graves received a student scholarship from the APHA Environment Section.

## UW/UBC OCCUPATIONAL AND ENVIRONMENTAL HEALTH CONFERENCE AT SEMIAHMOO

#### BLAINE, WA JAN. 3-4, 2008

**Kissel J.** Use of biomarkers in modeling dermal exposure **Adar S, Allen R.** Traffic noise: Spatial variation and relationship with air pollution

- Camp J. Health and safety of cedar block cutters on the Olympic Peninsula–a pilot study
- Firestone J. Preventing disability by improving workers compensation
- Yost M, Larson T, Simpson C. The latest in community air pollution exposure assessment
- Sathyanarayana S. Maternal pesticide use and birth weight in the Agricultural Health Study
- Takaro T. Home environment intervention and children's asthma Paulsen M. Development of diesel exhaust exposure biomarkers using LC/MS/MS and GC/MS

# 5TH ANNUAL AIR QUALITY & HEALTH WORKSHOP VANCOUVER, BC, MARCH 28, 2008

Catherine Karr, Infant bronchiolitis

#### SOCIETY OF TOXICOLOGY SEATTLE, WA, MARCH 15-19, 2008

- Browne EP, Tilton S, Stapleton H, Gallagher E. In vitro hepatic metabolism of PBDE congeners 99 and 209 by Chinook salmon
- Chen J, Costa LG, Dao K, Oram JF, Guizzetti M. Retinoic acid affects cholesterol homeostasis in astrocytes: A new mechanism of teratogenesis?
- **Costa LG, Kavanagh TJ, Giordano G.** Glutathione levels modulate the neurotoxicity of polybrominated mixture DE-71 in mouse neurons
- **Eaton DL.** New concepts in the etiology of breast cancer: From gene to environment and back again
- Echeverria D, Woods JS, Heyer N, Rholman D, Farin F, Li T. Associations between the 5-HTTLPR polymorphism and mercury for mood and behavior in humans
- Faustman E. Lorenzana R. Fish: Brain food or brain poison?
- Faustman E. Oceans and human health: Lessons learned from the Puget Sound
- Fay KA, Simpson CD, Dills RL, Paulsen MH, White CC, Kavanagh TJ. Basic components of wood smoke particulate matter cause oxidative stress and caspasedependent apoptosis in RAW 264.7 cells
- Gallagher EP, J Shao, Tilton S, Moneypenny C. Human fetal liver hematopoietic stem cells as a tool for understanding *in utero* injury of transplacental chemicals
- **Gilbert SG, McHugh TE**. Environmental Health & Community Review Board (EHCRB): Supplementing the traditional IRB
- Giordano G, Li L, Kavanagh T, Costa L. Carbachol prevents oxidative stress-mediated apoptosis induced by domoic acid in cerebellar granule cells
- Griffith WC, Vigoren EM, Faustman EM. Value of information analysis integrating diverse information sources to estimate variability of genotypes and phenotypes of CYP450 enzymes in metabolism of chlorpyrifos
- Guerrette Z, Yu X, Hong S, Kim E, Faustman EM. Arsenic induces different cell signaling pathways leading to apoptosis and cell cycle arrest in p53 +/+ and p53-/cells
- Guizzetti M, Giordano G, Moore N, Costa LG. Ethanol inhibits hippocampal neuron differentiation induced by carbachol-treated astrocytes
- Heyer NJ, Echeverria D, Woods JS, Farin FM, Li T. Dental mercury exposure, 5-HTTLTR status, and associations with self-reported symptoms

WINTER 2008

- Jansen KL, Cole TB, Li W, Park S, Furlong CE, Costa LG. The role of paraoxonase (PON1) in modulating toxicity of OP mixtures
- Koenig JQ, Mar TF, Primomo J. Associations between asthma emergency department visits and diesel emissions in Tacoma, WA
- Krival SR, Botta D, White CC, Mohar I, McConnachie LA, Kavanagh TJ, Simpson C. Principle components and hierarchical cluster analyses of HPLC/ECD-derived liver metabolite profiles in glutamate cysteine ligase transgenic mice treated with acetaminophen
- Krogstad F, Dusek E, Vigoren EM, Parker MS, Griffith WC, Simenstad CA, Faustman EM. Simultaneous analysis of domoic acid kinetics and ELISA assays to guide public health decisions for multiple shellfish species
- Le QH, Hong S, Yu X, Faustman EM. The role of Nrf2 in domoic acid-induced effects on early neurodevelopment
- Lefebvre KA, Tilton S, Bammler T, Beyer R, Janssen P, Farin F, Srinouanprachanh S, Gallagher E. Zebrafish: A tool for examining the effects of sub-acute algal toxin exposure in the vertebrate CNS
- Li T, Woods JS. Comparison of coproporphyrinogen oxidase (CPOX) and its genetic variant (CPOX4) in human liver
- Mohar C, White C, Kavanagh TJ. Acetaminophen-protein adducts are not sufficient for hepatocellular necrosis in mice: Modulation of toxicity by gender and glutamate cysteine ligase modifier subunit I
- Moore N, Guizzetti M, Giordano G, Costa LG. Ethanol inhibits muscarinic receptor-induced release by astrocytes of extracellular proteins involved in neuronal development
- Neff-LaFord H, Corey LM, White CC, Stewart J, Kaufman JD, Rosenfeld ME, Kavanagh TJ. Effects of glutathione depletion on pulmonary and splenic inflammatory cells following exposure to diesel exhaust
- Peck EC, Stapleton PL, Grollman AP, Eaton DL. Activation of aristolochic acid to mutagenic metabolites by human CYP1A1, 1A2 and 3A4
- **Poulton EM, Eaton DL**. Mutations in the PXR gene affect basal expression and inducibility, but do not prevent the ability of Sulforaphane to inhibit ligand binding to PXR
- Robinson JF, Yu X, Hong S, Beyer R, Faustman EM. Comparative gene expression analysis in C57 mouse embryos undergoing neurulation exposed to cadmium and methylmercury
- Scherer AC, Tsuchiya A, Younglove LR, Burbacher TM, Faustman EM. Fish consumption advisories: Toxicological risk and nutritional benefit messages to sensitive populations

- Shao J, White CC, Dabrowski MJ, Kavanagh TJ, ML Eckert, Gallagher EP. The role of mitochondrial and oxidative injury in BDE 47 toxicity to human fetal liver hematopoietic stem cells
- Simmonds PL, Martin MD, Leroux BG, DeRouen TA, Leitão JG, Bernardo MF, Luis HS, Kushleika JV, Woods JS. The contribution of dental amalgam to urinary mercury excretion in children
- **Tilton F,** Pettebone V, **Gallagher EP.** Assessment of the *in vivo* consequences of PBDE exposure to the developing vertebrate utilizing the zebrafish model
- Tilton SC, Shao JS, White CC, Kavanagh TJ, Gallagher EP. Mechanisms of chemically induced DNA damage by chlorpyrifos in the etiology of infant leukemia
- **Tsuchiya A,** Hardy J, **Burbacher TM, Faustman EM,** Mariën K. Fish intake guidelines: n-3 fatty acid intake and contaminant exposure in the Korean and Japanese communities
- VanDeMark L, Guizzetti M, G Giordano, LG Costa. Ethanol inhibits carbachol-induced axon outgrowth in hippocampal neurons by inhibiting ERK1/2 K
- Vigoren EM, Krogstad F, Griffith WC, Faustman EM. Removing censorship bias from correlation estimates of data sets censored by limits of detection
- Vitalone A, Costa L. Natural is not always safe: A lesson from the literature on the use of herbal products
- Vredevoogd M, Yu X, Hong S, Faustman EM. Critical molecular pathways of neurogenesis in chlorpyrifos response
- Yu X, Hong S, Faustman EM. Germ-line stem cells-gonocytes as an *in vitro* model for male developmental toxicity: Comparison from cytotoxicity to genomic responses to phthalates

The University of Washington hosted a Sunday night reception for alumni and friends at the Seattle Children's Research Institute.

Professor *Elaine Faustman* chaired a regional interest session, "Future paths for Puget Sound: Contaminants, cultures, and ecosystem risk characterization."

Professor **Dave Eaton** chaired a session titled: "New concepts in the etiology of breast cancer: From gene to environment and back again."

Professor **Evan Gallagher** chaired a session on "New insights for developmental toxicology."

Xiaozhong Yu, Bill Griffith, Hansel Ong, Melinda Vredevoogd, Elaine Faustman, and others won honorable mention in the "best paper" competition from the journal, Toxicological Sciences, Their paper was "A system-based approach to interpret dose- and time-dependent microarray data: Quantitative integration of gene ontology analysis for risk assessment."





Scott Barnhart



Erica Finsness



Amy Sly



Janessa Graves

Professor Scott Barnhart is stepping down after eight years as associate dean of the School of Medicine and medical director at Harborview Medical Center. He has a joint appointment in the departments of Medicine and Environmental and Occupational Health Sciences. He will continue his faculty appointment in our department.

Graduate student Erica Finsness spent a month in Cambodia working with a nongovernmental organization, RDI Cambodia, that focuses on water and sanitation improvements, and other aspects of health promotion. Her diary is linked from our department's website.

Lecturer **Rick Gleason** made a presentation on occupational health hazards in winemaking to the West Coast Constellation Winery Association's annual meeting in Napa, California, in January. He also spoke to the Seattle Vicinity Construction Safety Council in February on "Construction safety statistics in Washington: How does it compare to other states?" and the Teamsters Training Consortium annual conference in Ontario, California, in March on effective training techniques for adult learners.

Graduate student Janessa Graves received a grant, awarded collaboratively by the American Public Health Association and Colgate-Palmolive, to do work in Kenya for 18 months. She will evaluate a hand-washing promotion campaign, and will also try to help community residents develop a soap-making business, to facilitate sustainability of hand washing and other sanitation efforts there.

Communication director Kathy Hall and graphic designer Cathy Schwartz won Best of Show in the publications division of the Society for Technical Communication Puget Sound 2007-2008 competition. Their publication, the department's 2007 calendar, describes the range of the department's research, teaching,

and service activities. They, along with Collen Marquist, also won an STC Excellence Award for The Clearest Skies: A History of Seattle's Air Pollution Control Efforts, the concluding publication of the EPA/Northwest Research Center for Particulate Air Pollution and Health.

Associate Professor Matt Keifer was a reviewer for the Healthier Wisconsin Project. He also conducted a pesticide health effects training course for rural clinicians in San Juan, Puerto Rico.

Research Associate Professor L.-J. Sally Liu received a grant from the European Union as part of its Framework Programme 7 to study European-wide long-term air pollution effects. She will be leading the central European Exposure Assessment Center at the University of Basel, covering Switzerland, Austria, Northern Italy, and Southern Germany.

Alex Lu, a former research scientist in our department, was featured on the front page of the Jan. 30 issue of the Seattle Post-Intelligencer for his study of children and organic food.

The Pacific Northwest Agricultural Safety and Health Center (PNASH) continues its annual sponsorship of Ag Safety Day, the bilingual Washington Governor's Safety and Health Conference for the agricultural industry. Professor Richard Fenske and Outreach Director Helen Murphy served on the advisory board. PNASH organized a health fair at the Yakima event, including heat stress and pesticide exposure games, fluorescent tracer demonstrations, hearing tests, and health screenings. Keifer and Epidemiology graduate student Jon Hofmann presented preliminary results from their study of risk factors for pesticide exposure among pesticide handlers.

Sheela Sathyanarayana and Catherine Karr of our Pediatric Environmental Health Specialty Unit (PEHSU), received wide media coverage

ENVIRONMENTAL HEALTH NEWS

WINTER 2008

of their study of phthalates found in some baby products such as shampoos and lotions. They found that babies exposed to lotion, shampoo, and powder had more than four times the level of phthalates in their urine as those whose parents had not used these products. Phthalates have been linked to damage of the male reproductive system.

Murphy, Marcy Harrington, and Karr were active in this year's Western Migrant Stream Forum in Spokane. The forum is an educational conference for farmworker community health care providers and people engaged in Hispanic health research. Murphy, outreach director for PNASH, is also teaching eight pesticide recertification classes throughout the state, focusing on the acute and long-term effects of pesticide exposure and on study design issues.

**Amy Sly**, a 2006 MS graduate, has just been certified as a Marine Chemist. She is the first woman to achieve this certification. Certified marine chemists help prevent onboard health hazards, along with fires and explosions in accordance with Coast Guard and OSHA regulations.

Erin Corwine and Jeff Shirai were nominated for the UW's Distinguished Staff Awards for 2008. Corwine coordinates the school bus research program in Sally Liu's lab. Shirai manages John Kissel's lab.

Lecturer **Kate Stewart** has been awarded a Fulbright grant to teach and work in ergonomics projects in Nicaragua from October 2008 through March 2009. She will be teaching at the *Universidad Autonoma de Nicaragua* and will be working on a project to redesign the harnesses and bags used by coffee harvesters. She will help several students with their research in a garment factory. She is working with Dr. **Aurora Aragon**, director of the *Centro de Investigacion en Slaud Trabaho y Ambiente* (The Center for Research in Occupational and Environmental Health) to start a center for ergonomics in Central America.



Graduate student Erin Peck (left) leads an interactive exercise about the health effects of climate change at a UW teach-in Jan 31, as part of the "Focus the Nation" campaign. Climate change is the theme of National Public Health Week April 7–13



Marcy Harrington (left) teaches a health fair participant about heat stress at Ag Safety Day

#### STUDENT RESEARCH DAY

Each spring for more than 20 years, our department has hosted Student Research Day, an event celebrating the research of graduating master's students.

This year's event will take place on Thursday, May 29, and will include projects representing all of our academic program areas.

This is an opportunity to see some exciting research projects, learn more about activities within the department, recruit new employees, or make contact with faculty.

The seminar will be from 12:30 to 1:20 pm and the poster session from 1:30 to 3:00 pm in Room 316 of the South Campus Center. Refreshments will be served and there will be ample opportunity to meet students and discuss their work.

Please join us for Student Research Day and pass this information on to your colleagues. If you have any questions, please call the graduate program office at 206-543-3199 or e-mail *ehgrad@u.washington.edu*.

You can view last year's research at *http://depts.* washington.edu/envhlth/news/research\_day/srd\_07.php

#### THE FINE PRINI

COMMUNICATION DIRECTOR Kathy Hall

#### Contributing Editor

Adrienne Hidy Contributing Writers

WRITERS Kris Freeman Justin Reedy

#### Designer & Illustrator

Cathy Schwartz Editorial Assistants

Jennifer Gill Karen Hanson

Web Designer Ly Pham

DEPARTMENT CHAIR David A. Kalman Environmental Health News is published three times a year by the Department of Environmental and Occupational Health Sciences at the University of Washington. Inquiries should be addressed to: Environmental Health News Box 357234 Seattle, WA 98195-7234 Phone: 206-685-6737 E-mail: kjhall@u.washington.edu

Find the department on the Web at *http://depts.washington.edu/envhlth* 

Reprint permission is granted providing that copyright notice as given below is included. We would appreciate receiving a copy of your reprinted material.

This newsletter is also available online at http://depts.washington.edu/envhlth/info/ publications.html

© 2008, ISSN number 1548-1875

Department of Environmental and Occupational Health Sciences, University of Washington.

8 CCU

Printed by University of Washington Publications Services on recycled paper with vegetable-based inks.



#### University of Washington **chool of Public Health** and Community Medicine

Department of Environmental and Occupational Health Sciences Box 357234 Seattle, Washington 98195-7234

RETURN SERVICE REQUESTED

10-5804

Nonprofit US Postage PAID Permit No. 62 Seattle, WA