## ENVIRONMENTAL HEALTH

 $\rightarrow News$ 

School of Public Health and Community Medicine University of Washington - Autumn 2005

### STAGES OF WORKING LIFE

Every day on the job presents some sort of risk. However, the youngest and oldest workers face special challenges every time they go to the job. The proverbial ounce of prevention can help get them home safely. This issue of Environmental Health News looks at three research and prevention programs that focus on young workers, older workers, and injured workers of every age.

#### AGING WORKERS

Is the workplace ready for baby boomers who hit 55, 60, 62, 65 ... and keep on working?

The issue has become so critical that it was the topic of a one-day workshop at this year's Washington Governor's Health and Safety Conference. More than a hundred employers, safety specialists, and health care professionals convened in Tacoma on Sept. 27 to discuss how the workplace can be made more hospitable for older workers.

"Employers need to make some adjustments to accommodate the older workers," said Clinical Professor Michael Silverstein, the course director. The work environment can be modified with lifting equipment; work can be organized differently; training, physical fitness, and health promotion can help workers age well; and social support can keep workers productive and protect them from discrimination.

Several panelists described ways to organize the workplace so workers can continue to work safely and productively beyond typical retirement age. Employers need to do this, they said, if they are to stay competitive in a time when baby boomers are getting older and fewer young workers are available to replace them.

Older workers need to learn to work smarter, said Tim Gottberg, safety manager of GLY Construction in Bellevue. A generation ago, construction workers would show off how much plywood they could lift. Today, that same attitude could cost them their job because "we can't tolerate it... we know they will be injured," he said.

Today's construction companies invest in their workers with on-the-job stretching exercises and ice bags for the ride home from the job site, he said. Jobs are rotated so that nobody does the heavy work for a whole shift.

The oil industry does the same thing, said Jess Brown, projects safety supervisor for Shell PSR in Anacortes. "If you just have one guy on the jackhammer, he will go home with fingers feeling like sausages—he won't be able to hold a fork at dinner. But if four or five guys rotate on the jackhammer, they will all go home tired—but not disabled."

Such work policies help retain young employees, Gottberg said, and help older workers stay productive and lend their expertise to the industry.

### INSIDE

STAGES OF WORKING LIFE	1
AGING WORKERS	1
WHEN WORKERS GET HURT	3
TEEN WORKERS	4
CHILD LABOR HISTORY	5
Conference Presentations	6
Continuing Education	8
PEOPLE & PLACES	9
UPROOTED BY KATRINA	11
Governor's Health and Safety Conference	11
TOWN MEETING	12

#### AGING WORKERS continued from page 1

These changes have social and policy roots. People are working longer for a number of reasons, Silverstein said. Social Security's full retirement age is rising and there are incentives to continue working part-time beyond that age; fewer employers have mandatory retirement ages; people need secure health insurance until they reach the Medicare age of 65; and fewer jobs come with a guaranteed pension.

An after-lunch exercise, facilitated by Mary Hollins, gave workshop attendees a chance to "experience instant aging" and imagine what it might be like to have cataracts, partial deafness, and stiff joints.

Vision, hearing, and balance all deteriorate after age 60, according to Glenise McKenzie, a Registered Nurse and a graduate student at the University of Washington. Employers can respond by improving lighting, instituting hearing-safety and fall-prevention programs, and looking into job design or reassignments, she said.

Safety is a sound investment, said Carmen Steiner, administrator of the Bessie Burton Sullivan Skilled Nursing Residence at Seattle University. Her facility was one of the first to participate in the state Department of Labor and Industries' "zero lift" program in 1998.

The program has worked so well that—in an industry known for high turnover—some of the Sullivan home's staff keep working beyond 50, 60, and 70. Eighteen percent of the employees are over 50, Steiner said, and she has a 72-year-old laundry worker and a 73-year-old nursing assistant. Both of their jobs have been modified, Steiner said, with adjustable-height chairs, anti-fatigue mats, and patient lifting devices.

"We value our older workers," she said. "They come to us with a sense of commitment and loyalty. They have less absenteeism, great people skills and decision-making skills, and they serve as mentors for younger workers."

Construction and nursing are both industries that have trouble attracting and keeping younger workers, Gottberg and Steiner said. The average carpenter is 46 and the average nurse 55. Some older nurses move into work in medical records, administration, or admissions, while construction workers may go into supervisory or survey work.

One employer that actively recruits older construction workers is the Home Depot, according to Carol Kuhns, human resource manager of its Fircrest store. "Half of our employees are over 50, and many of them come from the construction industry," she said. "Their knowledge base in construction is incredible." The company has a partnership

with AARP to recruit older workers.

Home Depot's policy is to team older and younger workers, so that the younger workers can learn from the older ones—and can also be the ones to scamper up a ladder.

These four Washington employers are learning that there are "great rewards to retaining older workers—if we can keep them safe and healthy," Silverstein said. However, a recent AARP survey bore bad news. Although 60 to 65% of human resources professionals were aware of the improvements that could be made in the work environment, only 20 to 40% were actually doing something about it, Silverstein said.

"We need to close that gap," he said. "The consequences of not doing this will be significant, but the benefits for doing it will be enormous."

#### FOR FURTHER READING

Health and Safety Needs of Older Workers (2004). DH Wegman and JP McGee (eds.), Committee on the Health and Safety Needs of Older Workers. Washington, DC: National Research Council.

National Academy on an Aging Society, http://www.agingsociety.org/agingsociety/.

Wegman, DH (2000). Older workers. In: BS Levy & DH Wegman (eds.), Occupational Health: Recognizing and Preventing Work-related Disease and Injury (pp. 701-714). Philadelphia: Lippincott, Williams & Wilkins.



Older construction workers can lend valuable skills in less-active jobs.

### HEN WORKERS GET HURT

t's a riddle that puzzles occupational medicine physicians: Why do some workers who suffer noncatastrophic injuries-broken bones, carpal tunnel syndrome, and back injuries-return to work quickly, while others never come back?

The problem doesn't seem to be with the worker, but with the system that delivers medical and rehabilitation services. Dr. Gary Franklin, who heads the Occupational Epidemiology and Health Outcomes Program, has been working on a system-level solution.

Franklin and Professor Tom Wickizer of the Department of Health Services are nearing the end of a six-year project that makes a radical change in how health care is delivered to injured workers.

Two pilot projects were developed by the Washington State Department of Labor and Industries in collaboration with the UW. The first pilot project, in Renton, developed a Center of Occupational Health and Education at Valley Medical Center. The second was at St. Luke's Rehabilitation Institute in Spokane.

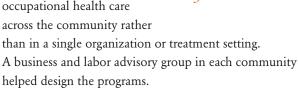
One goal is to give workers the freedom to choose their own doctors. That means working with the physicians and chiropractors in the community, teaching them best practices for occupational medicine.

A second goal is to reduce costs. Workers' compensation treatment claims cost Washington employers more than \$1 billion a year. The cost to workers in pain, career loss, and lost income is incalculable.

Previous UW studies found that injured workers with musculoskeletal injuries or carpal tunnel syndrome who had not returned to work within three to four months were unlikely ever to return to meaningful employment. "People fall through the cracks," Franklin said, "and they start sliding down the disability curve."

The pilot Occupational Health Services (OHS) project was based on the assumption that the first month or two of care is critical to preventing disabilities. The project addressed three issues: the targeting of the intervention to patients most at risk for a longterm disability, the timing of the intervention, and the appropriate expertise to use.

The project sought to improve the quality of occupational health care across the community rather



The community approach requires collaborations among hospital emergency rooms, urgent care facilities, and specialty medical groups.

The project sought to improve communication between doctors and employers about potential job modifications when the worker returns, and between doctors and claims managers. The project paid doctors for their time spent in such consultations. They were provided with continuing medical education and mentoring about occupational illnesses.

The Renton center began operation in July 2002, recruited about 130 providers (physicians and chiropractors), and has treated more than 12,000 injured workers. The Spokane center opened in April 2003. It has recruited 155 providers and treated more than 2,500 workers.

The Department of Labor and Industries designed the programs and the UW occupational epidemiology program is evaluating them. Dr. Franklin serves as medical director for L&I as well as being a research professor in our department.

#### FOR FURTHER READING

Committee on the Quality of Health Care in America (2001). Crossing the Quality Chasm. Washington, DC: National Academies Press.

Wickizer TM, Franklin GM, Mootz RD, Fulton-Kehoe D, Plaeger-Brockway R, Drylie D, Turner JA, Smith-Weller T (2004). A communitywide intervention to improve outcomes and reduce disability among injured workers in Washington state. The Milbank Quarterly 82 (3):547-567.



### EEN WORKERS

Statistics show
that about
200,000
workers under
age 18 are
injured
each year
nationwide

he University of Washington and the Washington state Department of Labor & Industries are working together to ensure that tomorrow's workers have a positive experience and make it safely through their first jobs. Through the department's School to Work program, new tools are being developed to help educate young workers in Washington state about the importance of workplace health and safety.

One of these tools is the new video, "Teen Workers: Real Jobs, Real Risks," said Darren Linker, manager of the School to Work program. The 13-minute video reveals workplace hazards and provides young workers with information to help keep them safe on the job.

The video, which will be distributed to schools in 2006, is part of the "Health and Safety Awareness for Working Teens" curriculum.

The curriculum is being used in high schools and youth employment training programs across Washington state. Through interactive activities and exercises, students learn to identify hazards, understand child labor regulations, and develop strategies

Trojana Trojan

Young grocery workers need to learn to stock shelves safely.

to reduce workplace hazards. They also practice communicating with supervisors to speak up for their legal rights, and learn how to prevent and deal with sexual harassment in the workplace.

Workplace safety education is important because the rate of injuries per hour worked is twice as high for teens as for adults. Factors that contribute to this high rate of injury include inexperience, lack of emotional maturity, limited knowledge about legal rights or what tasks are prohibited by the child labor laws, lack of communication skills, and a sense of invulnerability. Teens typically are reluctant to ask questions or convey concerns to their supervisors for fear of being fired or appearing incompetent. As a result, they may find themselves using unsafe equipment or performing tasks for which they are not trained.

The video illustrates factors that can lead to injury through the story of Mallory, who was severely injured in her first job at an ice-bagging plant. While Mallory was running an ice-bagging machine, her arms became caught in an auger. She suffered permanent muscle and nerve damage in both arms. In the video, Mallory explained that she didn't know the hazards posed by her summer job.

Severe injuries like those suffered by Mallory are usually reported. But many less serious accidents are not, making it difficult to get accurate statistics on injuries suffered by teen workers. Nevertheless, statistics indicate that about 200,000 workers under age 18 are injured and about 70 die each year nationwide.

Child labor laws provide some protection by setting age limits, restricting work hours, and prohibiting minors from potentially hazardous activities such as roofing, operating meat slicers, or demolition. But youths can still work on the family farm and in other workplaces that pose hidden risks, such as fast food restaurants.

Linker is working on a new curriculum for teens working in agriculture, the most dangerous industry for teen workers. Agriculture accounts for 42% of all work-related fatalities. The new curriculum addresses specific job hazards and work settings that teens may

## HOW YOUNG WORKERS ARE INJURED IN WASHINGTON

(Age 17 and younger, Data from 1992-2002)

27,688 Total Injuries

#### MOST COMMON INJURIES

Cuts	8,134	Sprains	4,644
Bruises	2,903	Burns	2,123

#### SERIOUS INJURIES

Broken Bones	654	Dislocations	94
Concussions	92	Amputations	43

Source: Washington state Department of Labor & Industries

encounter in agricultural work. The agriculture curriculum will be available to teachers in 2006.

After-school and summer jobs can provide invaluable experience for teens, as long as they have the knowledge, training, and equipment to stay safe, Linker said. He suggested several things employers can do to help young workers stay safe on the job:

- Understand state and federal rules for workers under 18
- Learn the training needs for workers who are new to the workforce
- Understand the ergonomic implications of teens using equipment that is designed for adult-sized bodies.

#### FOR FURTHER READING

Linker D, Miller ME, Freeman KS, Burbacher T (2005). Health and safety awareness for working teens: Developing a successful, statewide program for educating teen workers. *Family and Community Health* 28(3):225-238.

National Institute for Occupational Safety and Health. NIOSH Alert: Preventing Deaths, Injuries, and Illnesses of Young Workers. Cincinnati, OH: DHHS (NIOSH) Publication No. 2003-128. Available at:

http://www.cdc.gov/niosh/docs/2003-128/2003128.htm.

Health and Safety Awareness for Working Teens, http://depts.washington.edu/worksafe/.

For the "Teen Workers: Real Jobs, Real Risks" video or the "Health and Safety Awareness for Working Teens" curriculum, contact Darren Linker at *dlinker@u.washington.edu*.



#### CHILD LABOR HISTORY

A century or two ago, children needed to work to reduce their burden to society. An entire family might be hired for the same "wage"—the more children the better.

The first compulsory education law was enacted in Massachusetts in 1836, but by 1916, about 75% of children 14–16 left school to go to work.

After a series of false starts, child labor was finally regulated in 1936 with the Walsh-Healy Act, and in 1938, with the Fair Labor Standards Act. Still, several classes of young workers were exempted, including farmworkers and street trades such as newsboys.

Today, agriculture and newspaper delivery are two of the leading sources of work-related injuries among youth, and the street trades exemption is exploited by traveling youth crews, rated among the five worst jobs for teens by the National Consumers League.

#### FOR FURTHER READING

Miller ME, Bush D (2004). Review of the federal child labor regulations: Updating hazardous and prohibited occupations. *Am J Ind Med* 45(2):218-221.

US Bureau of Labor Statistics. Child Labor Laws. Bulletin No. 312.

Rutgers University. Child Labor Chronology.

http://www.scc.rutgers.edu/njh/MassConsumerism/
ChildlaborChronology.htm.

National Consumers League. Clocking in for Trouble: Teens and Unsafe Work. http://nclnet.org/childlabor/jobreport.htm.



### CONFERENCE PRESENTATIONS

#### Departmental researchers are in bold-faced type

#### Pacific Northwest Society of Toxicology September 8–9, Astoria, Oregon

**Isaac Mohar,** a doctoral student in the Toxicology program, won a second-place prize for his poster: "Effect of acetaminophen on cytosolic and mitochondrial glutathione in the livers of wild-type and GCLM-null mice."

Sabrina Peterson, a Nutritional Sciences doctoral student working with Drs. Johanna Lampe and Dave Eaton, took a first-place prize for her oral presentation: "The apiaceous vegetable constituents psoralen, 5-methoxypsoralen, 8-methoxypsoralen, and apigenin inhibit CYP1A2-mediated aflatoxin mutagenicity."

Research Scientist **Dianne Botta** presented her poster: "A model system to assess the role of modulated glutamate-cysteine ligase in toxicant induced oxidative stress."

#### Northwest Occupational Health Conference Oct. 12–14, Bellingham, Washington

Rick Gleason received the Distinguished Industrial Hygienist Award from the Pacific Northwest Section of the American Industrial Hygiene Association. It is an annual award in the Pacific Northwest in recognition of continuing contributions to the field of industrial hygiene. He joins four other departmental faculty who previously won the award: Pete Breysse (1966), Lee Monteith (1985), Mike Morgan (1999), and Janice Camp (2003).

Four graduate students received scholarships: Chris Ballew, Maggie Trabeau, Liz Gray, and Jason Woodruff. Four departmental alumni were on the conference committee: Dave Bonauto, Dianne Knutsen, Martin Rose, and Stephen Miller. Five alumni made presentations: Mac Davis, Paul Demers, Golan Kedan, Peregrin Spielholz, and Tim Takaro. The Continuing Education program put on a short course on risk communication; Janice Camp was on the organizing committee.

Burke B, Recognition and clinical management of occupational health-related illness

**Croteau G,** The importance of room acoustics in developing a noise control strategy

Flanagan ME, Wood floor refinishing: Exposure assessment and control options

**Gleason R**, Who is Mr. Stute and why do general contractors in Washington dislike him so much?

Kaufman J, Health effects of diesel exhaust and current diesel exhaust health effects related research

**Neitzel R**, Hearing protection in the construction trades: Who uses it, how often, and how well does it work?

Neitzel R, Use and effectiveness of hearing protectors in construction

Seixas N, Current challenges in occupational health and safety training: Response of the Northwest Center for Occupational Health and Safety ERC

**Simpson C,** Measurement of 1-Nitropyrene in ambient air particulate matter as a marker of exposure to diesel exhaust

### International Society of Exposure Analysis Oct. 30–Nov. 3, Tucson, Arizona

Chensheng (Alex) Lu, who worked in the Fenske lab before becoming an assistant professor at Emory University, received the Joan Daisey outstanding young scientist award this year. Sally Liu won the award in 2003. Scott Meschke co-chaired a symposium on the assessment of environmental exposures to microbiological agents.

**Allen R,** Estimation of exposure to ambient-generated PM in the "MESA Air" prospective cohort study



Alex Lu (right) with Rich Fenske, after Alex received his award.

- Cohen M, Design of the "MESA Air" prospective cohort study
- Dills RL, Evaluation of urinary methoxyphenols as biomarkers of woodsmoke exposure
- Fenske RA, Interventions to reduce para-occupational exposure for agricultural worker families
- Fenske RA, Use of exposure databases for pesticide health risk assessments
- **Kissel JC**, Dermal absorption of aqueous VOCs: Comparison of three skin models
- Lewtas J, Urinary PAH metabolites and personal exposure to PM 2.5 in Seattle panel studies
- Liu L-JS, Children's exposures and health effects from diesel exhaust before and after retrofit
- Lu C, Developing a real-time survey for collecting longitudinal dietary consumption patterns.
- Lu C, Estimate dietary exposure to OP pesticides in children using two different dietary surveys
- Lu C, Organic diets minimized children's dietary exposure to commonly found OP pesticides
- **Shirai JH,** Surface-area weighted dermal sediment loads following activities in tide flats
- **Smith J III,** Analysis of concordance of aggregate exposure predictions with CTEPP biomonitoring data
- **Spalt E,** Comparing concentration normalized fluxes from soil to Potts-Guy permeability coefficients

#### 2nd International Scientific Conference on Occupational and Environmental Health Nov. 16–18, Hanoi, Vietnam

- **Blackstone J,** Physical exposure differences between children and adults on different-sized computer input devices
- Croteau G, Use of ventilation fans for reducing worker exposures
- Croteau G, Camp J, Nguyen PT, Yost M, Comparison of Vietnamese high volume particulate sampling device to NIOSH total and respirable sampling devices
- Nguyen PT, Camp JE, Croteau G, Yost M, Silica dust exposures in Vietnamese brick plants
- Theskatuek A, Keifer M, Fungladda V, et al., Association between PON1 activity and toxicity among farm workers exposed to chlorpyrifos pesticide in Rayong province, Thailand

#### American Public Health Association Dec. 10–14, Philadelphia, Pennsylvania

Senior Lecturer Chuck Treser was reappointed to a three-year term on the APHA Education Board, and will serve as its chair for the 2005–2006 year.

- Barr HE, Kumph JM, Feng Q (M), Kapur K, Johnson P, Keifer M, Making a sensing ladder smart
- Crowe JL, Keifer M, Hofmann JN, *El Proyecto Bienestar*: A community health intervention with Yakima agricultural workers
- Daniell W, Cohen M, Factors influencing the decision to file a workers' compensation claim for occupational illness
- Hall KJ, Framing the debate: How labor and trade publications view occupational health policy
- Hofmann JN, Snyder K, Keifer M, A descriptive study of workers' compensation claims in Washington state orchards
- Keifer M, Snyder K, Hofmann JN, Negrete M, Salazar MK, Stockbridge H, Ladder-related accidents and injuries in Washington orchards: Case studies of worker compensation claims
- Keifer M, Salazar MK, Snyder K, Hofmann JN, Barr HE, Identification and prevention of injuries in Northwest orchards: An overview of the Orchard Injury Project
- Keifer M, Miller ME, Fenske RA, Cholinesterase monitoring in Washington state
- Miller ME, Keifer M, Fenske RA, Cholinesterase monitoring in Washington state: A report from the technical advisory group leading to medical monitoring regulations
- Salazar MK, Snyder K, Keifer M, Key informants' perspectives on injury and illness among orchard workers
- Salazar MK, Keifer M, Hofmann JN, Orchard work: An examination of workers' perspectives of risks and hazards
- Sears JM, Wickizer TM, Franklin GF, Smith K, Butterfield P, Nurse practitioners as attending providers in a workers' compensation system: Policy evaluation of recent legislation in Washington State
- Wickizer TM, Franklin GF, Mootz RD, Fulton-Kehoe D, Smith-Weller T, Effects of a workers' compensation quality improvement intervention in Washington state





### CONTINUING EDUCATION

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

Mar 20-23

Mar 27-30

(Portland)

#### NW CENTER FOR OCCUPATIONAL HEALTH & SAFETY

Jan 17	Annual Hazardous Waste Refresher
Jan 18	Annual Hazardous Waste Refresher
Jan 19	Annual Hazardous Waste Refresher
Jan 20	Annual Hazardous Waste Refresher
Jan 21	Annual Hazardous Waste Refresher
Feb 9	Puget Sound Occupational and Environmental Medicine Grand Rounds
Feb 14	Hazard Awareness for the New Generation Responder
Feb 15	Basic Instruments for the New Generation Responder
Feb 16	Safety and Sampling Awareness for the New Generation Responder
Feb 22	Accident and Incident Investigation
Mar 7	Zoonotic and Vector-Borne Disease: Current and Emerging Issues
Mar 9	Puget Sound Occupational and Environmental Medicine Grand Rounds
Mar 17	Applied Office Ergonomics
Mar 22-23	Clear Writing for Safety and Health Professionals

#### DIRECTORS MEET HERE

Scott MacKay, DEOHS director of Continuing Education, hosted the semiannual meeting of the 19 OSHA Training Institute Education Center (OTIEC) directors in October. MacKay facilitated the meetings with Dr. Henry Payne, director of the OSHA Office of Training and Education. Region X OTIEC Coordinator Leslie Fleming handled meeting logistics; department Chair Dave Kalman offered an official welcome; and School to Work Program Manager Darren Linker presented his newly produced video "Teen Workers: Real Jobs, Real Risks."

#### PACIFIC NW OSHA EDUCATION CENTER

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

meets WISHA,	OR-OSHA, orAlaska state standards.
Jan 9-11	OSHA 2264: Permit-Required Confined Space Entry ( <i>Portland</i> )
Jan 9-12	OSHA 510: Standards for the Construction Industry
Jan 17-20	OSHA 3010: Excavation, Trenching, and Soil Mechanics ( <i>Portland</i> )
Jan 17-20	OSHA 521: Guide to Industrial Hygiene (Richland)
Jan 23-26	OSHA 3095: Electrical Standards
Jan 23-26	OSHA 500: Trainer Course in Standards for the Construction Industry ( <i>Boise</i> )
Jan 30-Feb 2	OSHA 501: Trainer Course in Standards for General Industry
Jan 30-Feb 2	OSHA 6000: Collateral Duty for Other Federal Agencies ( <i>Portland</i> )
Feb 6-8	OSHA 2225: Respiratory Protection
Feb 7-10	OSHA 510: Standards for the Construction Industry ( <i>Anchorage</i> )
Feb 13-16	OSHA 2045: Machinery and Machine Guarding Standards ( <i>Portland</i> )
Feb 13-16	OSHA 5600: Disaster Site Worker Train-the-Trainer
Feb 21-24	OSHA 3110: Fall Arrest System (Portland)
Feb 27-Mar 2	OSHA 500: Trainer Course in Standards for the Construction Industry
Mar 6-8	OSHA 502: Update for Construction Industry Outreach Trainers
Mar 6-9	OSHA 510: Standards for the Construction Industry ( <i>Portland</i> )
Mar 8-10	OSHA 503: Update for General Industry Outreach Trainers
Mar 13-15	OSHA 2264: Permit-Required Confined Space Entry ( <i>Boise</i> ) tentative
Mar 13-15	Supervisory Safety and Health Duties

OSHA 521: Guide to Industrial Hygiene

OSHA 511: Standards for General Industry

### PEOPLE & PLACES

The DEOHS External Advisory Committee has three new members. Gary Weeks, the newly appointed director of the Washington state Department of Labor and Industries, replaces the former director, Paul Trause; Amber Carter replaces Boeing's Mike Muhm as the representative of the Association of Washington Business; and Daniel Schwartz, a professor of chemical engineering, replaces Mary Lidstrom as the College of Engineering representative. Lidstrom is the university's new vice provost for research.

Professor Dave Eaton has been named an associate vice provost for research for the University of Washington. He will step down as associate dean for research in the School of Public Health and Community Medicine to assume this new 40% role. He will continue as director of the Center for Ecogenetics and Environmental Health, and continue his teaching and other grant obligations.

Research Professor Joellen Lewtas received the Polycyclic Aromatic Hydrocarbon Research Award at the International Society for Polycyclic Aromatic Compounds (ISPAC) meeting in Toronto in August. This career award is presented every two years, and Lewtas is the first woman to win it. She gave a plenary lecture entitled "Air Pollution & Combustion Emissions: Characterizing Human Exposure, Biomarkers, and Risk from Polycyclic Aromatic Compounds."

Research Industrial Hygienist Mary Ellen Flanagan gave a presentation, "Silica Exposure and Control on Construction Sites," to the Port of Seattle Construction Safety Committee June 27.

Assistant Professor Gwy-Am Shin participated in a training course on microbiological assessment of water quality in Hanoi in June. About 20 people, mostly from the governmental sector, came from all over Vietnam. Shin gave several lectures on detection of pathogens. A similar training course is scheduled for Thailand.

Lecturer Rick Gleason was keynote speaker at the Washington State University (WSU) Safety Committee's annual meeting in August.

Professors Dave Eaton and Elaine Faustman attended a strategic planning session with David Schwartz, new director of the National Institute of Environmental Health







Joellen Lewtas

Sciences (NIEHS), to set the path for the next 10 years at NIEHS. Eaton also serves on an NIEHS review panel to critically evaluate the National Center for Toxicogenomics. His other travels have taken him to the University of Alaska, University of Montana, University of British Columbia, and Vanderbilt University.

Research Scientist Rick Neitzel was an invited speaker at the National Academy of Engineering conference in September, titled "Technology for a Quieter America." This conference is the first stage of a study that will develop recommendations to reduce the adverse effects of noise. He was also an invited speaker at the 2005 Alberta Health & Safety Conference and Trade Fair in November, giving a presentation on non-occupational noise exposures among construction workers.

Associate Professor Matt Keifer and other partners in the Yakima Valley project, *El Proyecto Bienstar*, recently attended the NIEHS Environmental Justice Program Investigators Conference in Talkeekna, Alaska,

Associate Professor Sally Liu received a \$105,000 donation from the International Truck and Engine Corporation for her study of health effects of old and new technology diesel school buses. The gift will allow Liu's research team to conduct a pilot study that distinguishes bus self-pollution from on-road vehicle pollution.

Associate Professor Evan Gallagher received funding from the National Oceanic and Atmospheric Administration (NOAA) to look at the health mechanism of brominaded fire retardants in the food chain from salmon to humans, and *in utero* effects. He also received funding from the National Marine Fisheries Service to study the use of

-continued on page 10



### PEOPLE & PLACES (CONTINUED)

genomics to assess effects of urban runoff on salmon olfaction and migration.

Associate Professor Joel Kaufman received a K Award, which is a mid-career research development award from NIEHS.

Occupational and Environmental Medicine Resident Jason Allen received a National Research Service Award post-doctoral fellowship to support the rest of his studies here.

Assistant Professor Scott Meschke received funding from the Department of Health to perform a risk assessment of water quality on cruise ships.

New staff include Amy Bomberger, graduate program assistant; Ly Pham, web designer; James Meadows, undergraduate program manager; and Karen Snyder, who is working in research translation in the Institute for Risk Analysis and Risk Communication.



Graduate Trainee Elizabeth Gribble was awarded second place for her paper at the International Neurotoxicology Meeting.

Recent PhD graduate Doug Johns started a post-doctoral fellowship at the Environmental Protection Agency (EPA) and Samir Kelada will be doing a post-doctoral fellowship with Francis Collins, director of the National Human Genome Research Institute, and David Schwartz, director of the National Institute of Environmental Health Sciences.

Karen VanDusen, an alumna of our undergraduate program and director of the UW's Environmental Health & Safety unit, has been named by Gov. Christine Gregoire to a three-year term on the Washington State Board of Health.

Commander Ted Carrell, a 1993 graduate of the Industrial Hygiene master's program, has been detailed to the president, Board of Inspection and Survey, as deputy chief of staff for the US Navy's Occupational Safety & Health and Environmental Compliance Programs.

Christine (Chrissy) Clark, a 2004 graduate of our undergraduate program, has returned from McMurdo Station, Antarctica, where she was a fire dispatcher. She has started her career with the Mason County Solid and Hazardous Waste Department as an environmental health specialist.

Professor Noah Seixas has been awarded two grants from the National Institute for Occupational Safety and Health (NIOSH). He received four more years of funding for his longitudinal follow-up of hearing in construction workers and four years of funding to train workers in the use of hearing protection devices and to reinforce the learning.

The department received five years of continued funding for the NW Center for Occupational Health and Safety, our NIOSH-sponsored Education and Research Center training grant. The proposal was led by Noah Seixas with support from each of the center's directors, Joel Kaufman, Michael Yost, Dennis Shusterman, Patricia Butterfield, John Kissel, Tom Wickizer, and Scott MacKay.

Chrissy Clark and native wildlife near the McMurdo Station. Antarctica.

#### UPROOTED BY KATRINA



Rumpai Phatpan and Chirapa (Pooky) Hongsawat were just beginning their studies in the Environmental Health department at Tulane Univer-

sity when Hurricane Katrina hit. Thus began a long journey that eventually led them to our department.

Both are employees of the pollution control department in the Ministry of Natural Resources and Environment in Thailand. Hongsawat is a master's student and Phatpan a PhD student.

They evacuated before the hurricane, taking a single suitcase and a rental car to Natchez, Miss. They thought they'd be gone two or three days. After the levees broke in New Orleans, they headed to Houston.

In typical graduate student fashion, they had "no hotel, no money," Phatpan said. In Houston, they connected with the Thai Embassy, which invited them to Washington, DC. They drove their rental car from Houston to DC, still unaware of much of what was happening in New Orleans and at Tulane.

The embassy housed them and provided Internet access. Through Tulane's website, they found a listing of schools of public health. They found that UW had classes similar to Tulane's, which would transfer for their degrees. "I had heard of the University of Washington; it has a good reputation in public health," Hongsawat said.

The Thai embassy flew them to UW. They didn't know anyone here, but **Phayong Thepaksorn**, a Thai student who is pursuing an MPH in our program, took them under his wing. He is visiting through the International Scholars in Occupational and Environmental Health program.

Hongsawat is collaborating with Jane Koenig on a research project while she is here, and Phatpan is taking classes.

They plan to return to Tulane for spring semester, and return to Thailand after they graduate.

# GOVERNOR'S HEALTH AND SAFETY CONFERENCE SEPT. 27-29, TACOMA

Clinical Professor Michael Silverstein directed a short course on aging workers for the Continuing Education program (see page 1).

Darren Linker, program manager with the School to Work program, put on a one-day safety program for 70 high school students from five school districts. Students and teachers took part in a variety of activities to demonstrate in different ways that workplace safety effects a wide range of careers.

**Rick Gleason** introduced the topic of "why workplace safety is important to the students' future."

Activities included a personal protective equipment (PPE) fashion show, which featured speakers from the construction industry, firefighters from the Tacoma Fire Department, and a nurse from United General Hospital. Each demonstrated the different types of PPE they use on a daily basis and talked about how students could train for these careers.

Students then learned basic ergonomic concepts as they rotated through five hands-on activity stations that were staffed by volunteers from the Puget Sound Human Factors and Ergonomics Society. Governor Christine Gregoire spoke to the students about why health and safety are important to their futures. The day concluded with students asking vendors questions in the exhibit hall. The program would like to acknowledge this year's sponsor, the Utilities Underground Location Center.

Students learn about personal protective equipment.



#### TOWN MEETING

he National Institute for Occupational Safety and Health (NIOSH) is updating its research agenda, and will hold a town meeting in Seattle Jan. 17 as part of the public involvement process.

The all-day meeting, at the Museum of History and Industry, is part of a national effort to keep working people, business, and the US economy strong and vital in the next decade by reducing worker injuries and illnesses. The morning session will focus on all regional occupational safety and health issues and the afternoon session will focus on the agricultural sector.

NIOSH is sponsoring the meeting in partnership with the University of Washington and Marshfield Clinic in Wisconsin. Local co-hosts include the Pacific Northwest Agricultural Safety and Health Center and the Northwest Center for Occupational Health and Safety, both NIOSH-funded regional centers housed in our department.

This meeting is one of a dozen public meetings occurring throughout the country in the months preceding a symposium on the National Occupational Research Agenda (NORA), April 18–20, 2006, in Washington, DC.

Speakers should pre-register at the NORA Web page, www.cdc.gov/niosh/nora. For more information, contact Dr. Max Lum, NIOSH, at mrl1@cdc.gov and 202-401-0721.

#### THE FINE PRINT

Communication Director

Kathy Hall

CONTRIBUTING
EDITOR
Adrienne Hidy

DESIGNER & ILLUSTRATOR
Cathy Schwartz

EDITORIAL
ASSISTANT
Kipling West

WEB DESIGNER
Ly Pham

DEPARTMENT
CHAIR
David A. Kalman

Inquiries should be addressed to *Environmental Health News*, Box 357234, Seattle, WA 98195-7234; Phone: 206-685-6737; E-mail: *kjhall@u.washington.edu*.

Environmental Health News is published three times a year by the Department of

Environmental and Occupational Health

Sciences at the University of Washington.

Find the department on the World Wide 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/envblth/info/publications.html

© 2005, ISSN number 1548-1875

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



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



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

RETURN SERVICE REQUESTED



Nonprofit US Postage PAID Permit No. 62 Seattle, WA