



DEPARTMENT OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH SCIENCES

ENVIRONMENTAL HEALTH

News

SCHOOL OF PUBLIC HEALTH AND COMMUNITY MEDICINE ■ UNIVERSITY OF WASHINGTON ■ SPRING-SUMMER 2007

ENVIRONMENTAL HEALTH— PROTECTING VULNERABLE POPULATIONS

Our department has five graduate programs in the occupational and environmental health sciences. This issue of Environmental Health News focuses on our Environmental Health master's degree program, which combines community-based participatory research, fieldwork, and bench science. Three stories about our graduate students explain how Environmental Health research can improve public health. The remainder of this issue summarizes the highlights of our 2006–2007 school year, including degrees, awards, and presentations at spring conferences.

TRACKING POLLUTANTS

An eagle crosses the overcast sky as University of Washington students wade in the muck of a low tide, carefully filling and cataloguing sample jars. The setting is spectacular, the task less so. They are trying to determine the sources of fecal contamination in Tulalip Bay, which has forced the Tulalip Tribes to post “no swimming” signs and close a subsistence fishery and productive shellfish beds.

Clarita Lefthand, the quiet woman at the center of the activity, combines science with a passion for her people. Although she belongs to the Navajo Nation 1400 miles to the south, she feels a strong connection with the Tulalip Tribes.

Using the tools of environmental microbiology, she can help the tribes' Natural Resource Department track the source of the fecal bacteria that have closed the bay. Specifically, she can determine whether the source is human, perhaps a wastewater treatment plant or failing septic system, or animal, either domestic or wild. This knowledge is key to controlling the pollution at its source. Lefthand is using two microbial source tracking techniques—bacteroides 16S ribosomal RNA gene and F+ RNA coliphage markers—to differentiate the sources of fecal contamination.

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*l to r: Clarita Lefthand,
Yolanda Sanchez,
Melissa Winters*



As an undergraduate at the University of Arizona, Lefthand majored in general biology and minored in chemistry. Once she had a taste of research, she wanted more, and decided to go to graduate school out of “pure curiosity” about sciences and their application. She chose our department to study with Assistant Professor John Scott Meschke, who has pioneered coliphage marker techniques. She will defend her master’s thesis this summer and will enter our PhD program this fall, continuing to study with Meschke. In April she helped organize the sixth annual Symposium of Native Scholarship sponsored by the UW chapter for the Native American Students in Advanced Academia.

Her career goals encompass both basic and applied sciences. She wants to teach biology, conduct pathogenesis

research, promote science education among Natives, and address environmental issues that affect tribes.

SCIENCE AND POLICY

Yolanda Sanchez came to the Environmental Health program through a different door—environmental justice. As an undergraduate at Arizona State University, she became concerned about the siting of toxic facilities in communities of color. “Once I got into it, I discovered a field that looked at that issue—Environmental Health.” As an undergraduate she majored in life sciences and minored in ethnic studies, but also was exposed to ecology and toxicology.

She came to the UW to learn more about risk assessment, the fate and transport of chemicals, and community based participatory research (CBPR). In her three years in the Environmental Health program, she has helped raise the department’s awareness of environmental justice. One summer, she developed our department’s environmental justice website.

Sanchez has worked as a research assistant for *El Proyecto Bienestar*, a CBPR project with Associate Professor Matthew Keifer in the Yakima Valley, and on a policy project with Clinical Professor Michael Silverstein assessing federal workplace health protection.

For her thesis, she investigated the seasonality of asthma attacks in the Yakima Valley and whether or not there is an association with agricultural processes. Her findings support previous epidemiologic studies that found that farmers—unlike the general population—develop asthma as they get older.

Sanchez is in the second wave of graduates from our concurrent degree program with the UW Evans School of

Fecal contamination closed Tulalip Bay to swimming, fishing, and shellfish harvesting



Photos: Clarita Lefthand

Public Affairs, graduating with both Master of Science and Master of Public Administration degrees. She says both of her degree programs encourage graduates to move between the public and private sectors.

This summer she is interning in the regulatory affairs department of Cisco Systems, an Internet networking company. This fall she begins a one-year fellowship through the Associated Schools of Public Health, working at the Environmental Protection Agency's (EPA) National Center for Environmental Research in Washington, DC.

Sanchez received the School of Public Health and Community Medicine's 2006 Martin Luther King Award. The award cited her passion for environmental justice and her commitment to increasing the number of students from under-represented backgrounds in the field of environmental health.

She recently appeared in *University Week* for her role in organizing the UW's chapter of the Society for Advancement of Chicanos and Native Americans in Science (SACNAS). The chapter's goal is to provide additional support for under-represented graduate students in the sciences, engineering, and mathematics.

"It is important for graduate students to connect with other graduate students who have similar experiences," she said. She hopes UW SACNAS will evolve into a community of scientists of color and provide academic and social support.

ENVIRONMENTAL LAW

Melissa Winters became interested in Environmental Health as a law student at Seattle University, where she studied with Catherine O'Neill, an expert in environmental justice and environmental law.

With O'Neill, she worked on a research project reviewing the impacts of the EPA's proposed rule for regulating mercury emissions from coal-fired power plants. Her analysis made her realize that the harms of the

proposed rule will be visited disproportionately on Native Americans, especially tribes catching and eating fish from hot spots such as the Great Lakes. She was concerned that the rule did not address these differing circumstances of exposure and was motivated to continue to investigate the intersections of law and public health.

After law school, her interest in environmental law made Winters wish she had a greater understanding of the scientific and technical issues. She enrolled in our EH program, where she just finished her first year.

This summer she began a one-year fellowship under the EPA's National Network for Environmental Management Studies. At the EPA's Region 10 office in Seattle, she is participating in the National Partnership for Environmental Priorities Project, where she works with industry representatives to develop best management practices for several industrial sectors, including petroleum refineries and pulp and paper mills. In a second project, she will develop best practices for waste management at federal facilities.

At the UW, she is working with professors Rich Fenske and Mike Yost on pesticide aerial spray drift. She will continue to take classes, such as risk assessment and epidemiology in the fall. "Environmental Health is such a broad field," she said. "It has such a diversity of offerings."

FOR FURTHER READING

Tulalip Tribe's Natural Resource Department

<http://www.tulalip.nsn.us/>

Science society's new chapter gaining momentum at the UW, *University Week*, May 24, 2007 <http://uwnews.washington.edu/ni/week/weekarticle.asp?articleID=33668>

DEOHS Environmental Justice website

<http://depts.washington.edu/ej/>

O'Neill C. Environmental justice and water quality:

Protecting tribes' rights to catch and consume fish, March 8, 2007, Podcast, Lewis & Clark Law School

<http://lawlib.lclark.edu/podcast/?p=177>

STUDENT RESEARCH DAY, MAY 24, 2007

In a seminar session, one second-year master's student from each of the academic programs was selected to present an oral summary of his or her thesis research. The remainder of the graduating master's students presented posters of their work. Thesis abstracts are online at <http://depts.washington.edu/envhlth/news/researchday07.html>.

Faculty preceptors are listed in parentheses.

MODULATING TOXICITY

Karen L. Jansen, MS, Toxicology (*Lucio Costa*)

Paraoxonase (PON1) is an enzyme that protects people from the toxic effects of organophosphorus insecticides. Genetic differences in PON1 can affect how toxic the pesticide might be for an individual. This study exposed mice of different PON1 genotypes to metabolites of the insecticides chlorpyrifos, diazinon, and malathion. PON1 genotype greatly influenced the interaction among the three metabolites by altering the inhibition of another organophosphate detoxifying enzyme, carboxylesterase. This has implications for exposure of people to mixtures of pesticides.



Karen Jansen



Christopher Miele

OPTICAL REMOTE SENSING

Christopher D. Miele, MS, Industrial Hygiene

(*Michael Yost*)

Particulate air pollution is an environmental and occupational health risk because these fine particles pass through the nose and throat and penetrate deep into lung tissue. Diesel particulate matter is among the highest priorities of the Puget Sound Clean Air Agency. This feasibility study used an optical remote sensing technique, ultraviolet differential optical absorption spectroscopy, to measure multiple air pollutants in an open path over Interstate 5 in downtown Seattle. The Clean Air Agency already uses this technique for monitoring gases, and this study tested its feasibility for monitoring particle concentration.

TRAFFIC-RELATED AIR POLLUTION

Victor Van Hee, MPH, Occupational and Environmental Medicine (*Joel Kaufman*)

Epidemiologic studies have linked heart disease and death with particulate air pollution, but the mechanisms remain unclear. This study looked at two changes generally associated with congestive heart failure, increased left ventricular mass index (LVMI) and decreased ejection fraction (EF). Analyzing data from the Multi-Ethnic Study of Atherosclerosis (MESA) Air Pollution Study, he found that people living within 50 meters of a major roadway had a significant increase in LVMI. Though not statistically significant, the effect was larger for Hispanics, African Americans, smokers, diabetics, and men. The LVMI appears to be a more sensitive indicator than EF.

SEASONAL PESTICIDE APPLICATION

Lisa A. Tolbert, MS, Environmental Health (*Michael Yost*)

As residential growth has expanded into agricultural areas, concerns have arisen about pesticide drift into nearby communities. This pilot study indicates that pesticide levels vary significantly over time but do not vary significantly by location. This suggests that future air monitoring should sample frequently enough to capture day-to-day variations in pesticide concentrations, but not necessarily focus on location, because the community air shed appears to be well-mixed.



Lisa Tolbert



Victor Van Hee

STUDENT POSTER SESSION

Environmental Health, MS

Clarita Lefthand (*John Scott Meschke*) Identification of the source of fecal contamination in Tulalip Bay with bacteroides 16S rRNA gene and F+ specific coliphage markers

Alison C. Scherer (*Elaine Faustman*) Comparative analysis of fish consumption advisories to pregnant women and women of childbearing age

Leah D. Tivoli (*John Scott Meschke*) *Clostridium perfringens*: A reservoir of antibiotic resistance genes in the environment?

Industrial Hygiene, MS

Stephanie C. Griffin (*Noah Seixas*) Indicators of hearing protection use: Self report and research observation

Christopher J. Jacomme (*Michael Morgan*) Field evaluation of a two-zone model used to predict workplace air contaminant concentrations

Toxicology, MS

Steve Krival (*Terrance Kavanagh*) Principal components analysis of liver tissue metabolites in male glutamate-cysteine ligase transgenic and wildtype mice treated with acetaminophen

Li Li (*Lucio Costa*) Protective role of carbachol in domoic acid-induced apoptosis in cerebellar granule neurons

Environmental and Occupational Health, MPH

Janessa Graves (*William Daniell*) Fluoride and dental fluorosis on San Juan Island, Washington

Erin M. O'Brien (*Joel Kaufman*) Gene-environment interactions in the Multi-Ethnic Study of Atherosclerosis and Air Pollution (MESA Air)

Brian D. Smith (*John Scott Meschke*) The effect of surface charge, negative and bipolar ionization on the deposition of airborne bacteria

Michelle M. Sommargren (*Richard Fenske*) Reducing childhood pesticide exposure by targeting the clinician pesticide training gap: The design, implementation and evaluation of an online curriculum

Joyce Tseng (*Matthew Keifer*) Impact evaluation of a farmworker environmental and occupational health community-based participatory research course in the Yakima Valley, Washington



Cathy Schwartz

Faculty, staff, students, and alumni mingle and view posters at Student Research Day

Occupational and Environmental Medicine, MPH

Douglas A. Badzik (*William Daniell*) Hearing loss in US Army aviators, comparing 2005 to 2001

Ingeborg Cox (*Matthew Keifer*) Testing validity of audio computer assisted self interview (ACASI) among illiterate and low literate pesticide handlers

Michael J. Sigmon (*William Daniell*) Where there's smoke, is there disease? A study of environmental airborne exposures in soldiers returning from Iraq



CONFERENCE PRESENTATIONS

Departmental presenters in bold green type

UW Undergraduate Research Symposium

May 18, Seattle

De Leon GP, Nelson JG, Santiago CT. A pilot study on air pollution exposure and airway inflammation on children from particulate matter, 2.5 μ m

American Thoracic Society

May 18–23, San Francisco

Allen J, Trenga CA, Peretz A, Sullivan JH, Carlsten CR, Kaufman JD. Effect of diesel exhaust on antioxidant and oxidative stress responses in metabolic syndrome subjects
Bai N, Suzuki H, Corey LM, Kido T, Rosenfeld ME, Laher I, van Eeden SF. Mechanisms of chronic diesel exhaust particle inhalation-induced exaggerated vasoconstriction in mouse aorta

Carlsten C, Kaufman JD, Trenga CA, Peretz A, Sullivan JH. Coagulation markers in metabolic syndrome subjects exposed to diesel exhaust

Corey LM, Baker C, Peck EC, Wilkerson J, Stewart J, Neff H, Kavanagh TJ, Kaufman JD, Luchtel DL, Rosenfeld ME. Inflammatory response due to diesel exhaust in the Apolipoprotein E deficient mouse

Corey LM, Baker C, Stewart J, Kavanagh TJ, Kaufman JD, Luchtel DL, Rosenfeld ME. Changes in heart rate and heart rate variability in the Apolipoprotein E deficient mouse with exposure to diesel exhaust

Kaufman JD. The link between particulate matter exposure and cardiovascular events

Koenig JQ, Mar TF, Hallstrand T, Szeffler S, Covar R. Relationship between airway inflammation and air pollution in children with asthma in Denver CAMP

Mar TF, Koenig JQ, Schreuder AB, Lumley T, Covert DS, Larson TV. Seasonal associations between Seattle fine particles, total carbon, and emergency department visits for asthma in children

Negash AA, Jansen KL, Mar TF, Koenig JQ. Respiratory effects of sulfur dioxide exposure in people with asthma

Peretz A, Sullivan JH, Leotta DF, Trenga CA, Sands FN, Allen J, Carlsten C, Aulet MR, Gill EA, Kaufman JD. Endothelial-mediated acute vasoconstriction in response to diesel exhaust

Shusterman D, Jansen K, Weaver E, Koenig J. Use of the nasal NO response to humming as an index of paranasal sinus ostial patency: Methods standardization

Shusterman DJ. Allergic inflammation and irritant responsiveness: Human studies

Sullivan JH, Peretz A, Beyer D, Carlsten C, Bammler TK, Kaufman JD, Hallstrand TS. Transcriptional effects of diesel exhaust on asthmatic airways

Sullivan JH, Peretz A, Carlsten C, Farin FM, Allen J, Wilkerson JH, Aulet MR, Stewart JA, Larson TV, Kaufman JD. Effect of controlled diesel exhaust exposures on levels of inflammatory cytokines in adults with metabolic syndrome

Vedal S, Dutton S, Hannigan M, Matalkah F, Miller SL, Kim SY, Sheppard L. Motor vehicle emissions and daily mortality in the Denver Aerosol Sources and Health (DASH) study

American Society for Microbiology

May 21–25, Toronto

Clarita Lefthand and Leah Tivoli *won student travel grants.*

Lefthand CM, Coker ES, Rohlik CM, Beck NK, Meschke JS. Identification of the source of fecal contamination in Tulalip Bay with bacteroides 16S rRNA gene and F+ specific coliphage markers

Novosselov IV, Beck NK, Ariessohn PC, Kychakoff Sly GA, Yost MG, Meschke JS. Concentration of airborne microorganisms using a novel aerodynamic lens

Pearson AL, Long V, Meschke JS, Roberts MC, Mayer JD. Identification and antimicrobial susceptibility of bacteria isolated from rural Ugandan drinking water sources using EC 3M petrifilms

Salo-Zieman VLA, Gough HL, Meschke JS, Ferguson JF. Abundance and morphological diversity of virus-like particles in anaerobic wastewater digesters and acetate-fed enrichments

Smith BD, Meschke S, Yost M, Miksch RR, Gefter P, Gehlke S, Halpin HA. The effect of surface charge, negative and dual ionization on the deposition of airborne bacteria

Tivoli L, Beck NK, Roberts MC, Meschke JS. *Clostridium perfringens*: A reservoir of antibiotic resistance genes in the environment?

American Industrial Hygiene Conference & Expo

June 2–7, Philadelphia

Three students were awarded scholarships. **Oleg Antonchuk** won a 3M scholarship and **Loren Kaehn** and **Rick Neitzel** won AIHA scholarships.

Carter S, Froats JFK, Nowsiwsky A, Penniall K. Industrial hygiene management of industrial maintenance and construction projects

Gleason R, Rekus J. New safety fundamentals for industrial hygiene and safety

Harris M, **Carter S**. Welding health and safety and ventilation for hot work in confined space

Neitzel R, Paulsen M, Simpson C, Naeher L, Dunn K, Stock A, Barr D. Comparison of biomarkers for use in assessing smoke exposure among wildland firefighters

Seixas N. Occupational health and safety experiences of Seattle area day laborers

Spielholz P, Clark R, Sjoström T. Fatal falls from elevation in construction: An evaluation of incidents in Washington state and recommendations for prevention

National Environmental Health Association June 18–21, Atlantic City

Lefthand C. Identification of the source of fecal contamination in Tulalip Bay with bacteroides 16S rRNA gene and F+ specific coliphage markers

The Teratology Society June 23–28, Pittsburgh

Professor **Elaine Faustman** conducted the meeting as president of the Society and graduate student **Alison Scherer** won a travel award.

Robinson JF, Yu X, Griffith WC, Hong S, Beyer

RP, Faustman EM. Metal-induced toxicogenomic response in resistant and sensitive mouse strains undergoing neurulation

Scherer A. Comparative analysis of fish consumption advisories to pregnant women and women of child-bearing age

IH DEGREE UNDERGOES CHANGE

The master's program in Industrial Hygiene has been reorganized into a degree called the Master of Science in Occupational and Environmental Exposure Sciences to better represent the current content and professional practice of this discipline.

Curriculum changes include a core sequence of three courses with expanded content on exposure assessment, regulations, and controls for both occupational and community settings. As an alternative to completing a thesis, students will be given an option of developing an online portfolio based on a practical project, capstone course, and internship experience.

Students enrolled in the exposure sciences MS degree select one of four learning emphasis areas: occupational hygiene, ergonomics and human factors, health and safety management, and exposure biomarkers. Students entering in autumn quarter 2007 will choose one of these four emphasis areas along with the associated electives to complete the curriculum. Students who were admitted in autumn 2006 can opt to change to the new program or complete the IH program they began.

SUMMER STUDENTS

The second crop of selected undergraduates has entered our competitive summer research program. The students and their research advisors are:

Amna Aziz, Stanford University (*Scott Meschke*)

Tonya Brooks, University of Maryland (*Joel Kaufman*)

Iana Ivanova, University of Washington (*Marilyn Roberts*)

Nassir Kowdan, University of Washington (*Scott Meschke*)

Larissa Jones, Boston College (*Terry Kavanagh*)

Anais Parker, Spelman College (*John Kissel*)

Jeff Walls, University of Washington (*Matt Keifer*)

Aziz, Kowdan, Jones, and Parker are supported through UW's Health Sciences Center Minority Students Program.



2007 COMMENCEMENT

Please see page 11 for awards

GRADUATE DEGREES

Summer 2006

Michael Garry, PhD
Peter Lang, MS
Spencer Olsen, MPH
Joseph Smith III, MS
Amy Tsuchiya, MS
Xun Zhang, PhD

Autumn 2006

Kyung-Hoon Kim, MS
William Polk, PhD
Susan Sheldon, MPH
Amy Sly, MS
Wayne Turnberg, PhD

Winter 2007

Jason Allen, MPH

Spring 2007

Douglas Badzik, MPH
Stephanie Griffin, MS
Christopher Jacomme, MS
Xue Feng Ren, PhD
Yolanda Sanchez, MS
Michael Sigmon, MPH
Brian Smith, MPH

DEOHS graduation,

l to r: Rich Fenske, Carrie Sadovnik, James Meadows, Karen Hanson, Chris Diangco, Jack Hatlen

Michelle Sommargren, MPH
Lisa Tolbert, MS
Joyce Tseng, MPH
Victor Van Hee, MPH
Yupeng Wang, PhD

Summer 2007

Stephen Krival, MS
Clarita Lefthand, MS
Li Li, MS
Christopher Meile, MS
Alison Scherer, MS
Ming-Yi Tsai, PhD

UNDERGRADUATE DEGREES

Autumn 2006

Ruth Famurewa
Brenda Wertman

Spring 2007

Rebecca MahLien
Cheng Arrowsmith
Henry Buu Doan
Gerard Paul De Leon
Andrea Lynn Finley
Candice Suping Huang
Li Ming Leung
Michelle M. Matias
Christine Thao Nguyen
Christine Rohlik

Jana Rone
Joy Rowe
Steven Weber
Jenna Will
Derrick You

Summer 2007

Quynh Ngoc Bui
Trieu Hai Dang
Cheryl Kahealani DeAguiar
Joseph Gardener Nelson
Kim Uyen Nguyen
Christine Santiago
Jackelin Tran

COMMENCEMENT SPEAKER

It's a standard theme—commencement speakers assure new graduates that they can change the world. This year's departmental speaker, Carrie (Carrel) Sadovnik, had more credibility than most.

A 1996 graduate of our Industrial Hygiene master's program, Sadovnik directs employee health and safety for the New York City Department of Health and Mental Hygiene. She oversees occupational health and safety for police, firefighters, and other emergency personnel.

She spoke movingly of the difference that industrial hygienists made when the World Trade Center was attacked September 11, 2001. Suddenly "respirator fit testing" was a household word and discussions of air quality could be heard on every subway platform.





CONTINUING EDUCATION & EVENTS

To 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/ebce>. Courses are in Seattle unless noted.

PACIFIC NORTHWEST OSHA EDUCATION CENTER

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

- Jul 16–18** OSHA 502 Update for Construction Industry Trainer (*Portland*)
- Jul 17–19** OSHA 3095 Electrical Standards
- Jul 18–20** OSHA 503 Update for General Industry Trainer (*Portland*)
- Jul 23–26** OSHA 510 Standards for the Construction Industry
- Jul 30–Aug 1** OSHA 2250 Principles of Ergonomics
- Aug 6–9** OSHA 501 Trainer Course for General Industry
- Aug 6–9** OSHA 500 Trainer Course for Construction Industry (*Portland*)
- Aug 13–16** OSHA 2015 Hazardous Materials (*Anchorage*)
- Aug 13–16** OSHA 6000 Collateral Duty Course for Other Federal Agencies (*Portland*)
- Aug 20–23** OSHA 500 Trainer Course for Construction Industry (*Boise*)
- Aug 21–23** OSHA 3110 Fall Arrest Systems (*Portland*)
- Aug 27–30** OSHA 521 Guide to Industrial Hygiene
- Sep 4–6** Supervisory Safety and Health Duties
- Sep 4–7** OSHA 2015 Hazardous Materials (*Portland*)
- Sep 10–13** OSHA 501 Trainer Course for General Industry
- Sep 11–13** OSHA 2225 Respiratory Protection (*Portland*)
- Sep 17–19** OSHA 503 Update for General Industry Trainer
- Sep 17–20** OSHA 511 Standards for the General Industry (*Portland*)
- Sep 19–21** OSHA 502 Update for Construction Industry Trainer
- Sep 24–27** OSHA 5600 Disaster Site Worker Train-the-Trainer
- Oct 1–4** OSHA 510 Standards for the Construction Industry (*Portland*)
- Oct 1–4** OSHA 6000 Collateral Duty Course for Other Federal Agencies
- Oct 9–11** OSHA 3010 Excavation, Trenching & Soil Mechanics

- Oct 9–12** OSHA 521 Guide to Industrial Hygiene (*Portland*)
- Oct 15–18** OSHA 501 Trainer Course for General Industry (*Richland*)
- Oct 16–18** OSHA 2250 Principles of Ergonomics (*Boise*)
- Oct 22–25** OSHA 500 Trainer Course for Construction Industry (*Portland*)
- Oct 22–25** OSHA 2045 Machinery & Machine Guarding Standards
- Oct 30–Nov 1** OSHA 2264 Permit-Required Confined Space Entry
- Nov 5–7** OSHA 500 Trainer Course for Construction Industry (*Anchorage*)
- Nov 5–8** OSHA 510 OSHA Standards for the Construction Industry (*Richland*)
- Nov 6–8** OSHA 3095 Electrical Standards (*Portland*)
- Nov 7–9** OSHA 501 Trainer Course for General Industry (*Anchorage*)
- Nov 13–16** OSHA 511 Standards for the General Industry
- Dec 3–5** OSHA 502 Update for Construction Industry Trainer (*Portland*)
- Dec 4–6** OSHA 3110 Fall Arrest Systems
- Dec 5–7** OSHA 503 Update for General Industry Trainer (*Portland*)

NORTHWEST CENTER FOR OCCUPATIONAL HEALTH & SAFETY

- Jul 17** Annual Hazardous Waste Refreshers
- Jul 18** Annual Hazardous Waste Refreshers (*Olympia*)
- Jul 19** Annual Hazardous Waste Refreshers
- Sep 25** Safety and Health Training: What's New, What Works, What's Needed? (*Tacoma*)
- Oct 17** It's Not Your Father's Workplace: Promoting Wellness Among the Changing and Diverse Workforce & Workplace (*Seaside, OR*)
- Nov 5–7** CHMM National Overview Course
- Dec 4** Respiratory Protection: Medicals, Fit Testing, Training, and Documentation



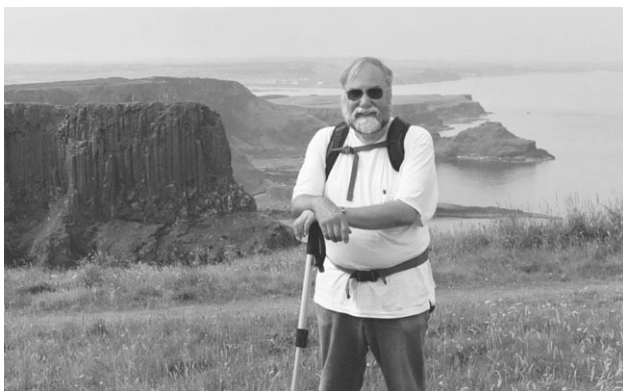
In May, Associate Professor **Pete Johnson** attended a computer systems conference in Stockholm, Sweden, and presented a paper, “Kids and gender: differences in exposure and how anthropometric differences could be incorporated in computer input device design.” He co-authored a second paper, “Evaluation of a mouse designed to improve posture and comfort” with Dan Odell of Microsoft. He helped organize a satellite course on the ergonomics of mobile devices and personal digital assistants (PDA), sponsored by Göteborg’s University and the UW’s School of Public Health and Community Medicine.

In its January-February issue, *The Journal of Environmental Health* identified 15 leaders in environmental health who are steering us into the future. Clinical Associate Professor **Carl Osaki** was included, as was Ngozi Oleru, his successor as director of environmental health for Seattle and King County.

Keli Bort has replaced **Becky Rooney** as our department’s fiscal manager. Rooney has moved to the UW Budget Office on upper campus. Bort was previously our payroll coordinator.

Three faculty members have been promoted: **Tom Burbacher** and **Zhengui Xia** to full professor, and **Pete Johnson** to associate professor.

Associate Professor **Matt Keifer** served on the National Merit Review panel for the Healthier Wisconsin Partnership Program, a public health grant-making program at the Medical College of Wisconsin.



Courtesy of Chuck Treser

Chuck Treser in Ireland

Graduate students **Clarita Lefthand** and **Leah Tivoli** each won student travel awards to attend the American Society of Microbiology meeting in Toronto in May.

Professor **Zhengui Xia’s** manuscript was published in the April issue of the *Journal of Cell Biology* and highlighted as a key paper in the section called “In this issue: How ERK5 prompts proliferation.”

Professor **Tom Burbacher** volunteered to replace **Bill Daniell** as the department’s Faculty Senate representative starting September 2007. Professor **Dan Luchtel** will become chair of the senate on August 1.

Clinical Professor and Boeing epidemiologist **Mike Muhm** is first author of a paper in the July 5 issue of the *New England Journal of Medicine*, titled “Effect of aircraft-cabin altitude on passenger discomfort.”

Senior Lecturer **Charles D. (Chuck) Treser** participated in the Biennial World Congress on Environmental Health at Trinity College in Dublin, during a sabbatical last summer. He presented two papers at the International Environmental Health Faculty Forum at Dublin Institute of Technology.

Lecturer **Rick Gleason** spoke about the UW Disaster Site Train-the-Trainer Program at the Pacific Northwest Section, American Industrial Hygiene Association’s spring symposium in Lacey, Washington. He also spoke at the National Institute of Environmental Health Sciences (NIEHS) Worker Education and Training Program, National Trainers Exchange on using real-world case histories, and at the Voluntary Protection Program Association Regional Conference in Portland, Oregon, on voluntary protection programs.

Lecturer **Kate Stewart** presented two, two-day regional training sessions in the South and Southeast for Weyerhaeuser ergonomics site coordinators.

Research Associate Professor **L-J Sally Liu** presented “Assessing long-term source-specific air pollution exposure and effects in a large population-based Swiss cohort,” an invited seminar at the World Health Organization on Health relevance of particulate matter from various sources in Bonn, Germany, in March. She also presented a paper, “How to get quickly up-to-date information on air pollution,” at the Swiss Society of Pneumologie conference in March.

*l to r: Joyce Tseng, Matt Keifer,
Rosie Schaffer*



Janessa Graves, an MPH student in Environmental and Occupational Health, presented a poster at the International Union for Health Promotion & Education conference in Vancouver, BC, in June, and won a travel award from the UW Graduate and Professional Student Senate. She was also an invited presenter at the Canadian/International Symposium on Settings for Health and Learning. She works in the Department of Dental Public Health Sciences (School of Dentistry), where she manages a public health project in the Pacific Islands. She became interested in public health as a Peace Corps volunteer in Fiji.

The **Occupational and Environmental Medicine Clinic** recently won a \$100,000 planning grant from the state Department of Labor and Industries for a COHE (Center for Occupational Health and Education). The funding will be used for activities related to reducing costs on workers' compensation funds. Adjunct Assistant Professor **Jordan Firestone** spearheaded this effort.

Isaac Mohar, Tingting Li, and Fred Tilton won NIEHS Superfund/EPA scholarships to attend the Environmental Health Entrepreneurship Academy at the Tahoe Center for Environmental Studies.

Nadia Moore received an award from the Research Society on Alcoholism to attend its annual meeting July 8–11 in Chicago.

Affiliate Associate Professor **Steve Gilbert** has started a new project called Toxipedia, a wiki-based site at www.toxipedia.com. The site, designed to connect science and people, is a free toxicology encyclopedia and resource center. Toxipedia is seeking articles from scientific and public health experts willing to share their knowledge. Gilbert invites his peers to help create this resource for the general public, students, media, legislators, and public health experts. ■

ANNUAL CEREMONIES

At the annual School of Public Health and Community Medicine graduation ceremony on June 8, our students, staff, and faculty were the recipients of several awards.

Victor Van Hee, an MPH student in Occupational and Environmental Medicine, won the School of Public Health and Community Medicine's Gilbert S. Omenn award for academic excellence for master's students. **Ming-Yi Tsai** was nominated for the doctoral student award. **Quynh Ngoc Bui** was named the department's outstanding undergraduate student and **Lisa Tolbert** the outstanding graduate student.

Joyce Tseng, an MPH student in Environmental and Occupational Health, won the student community service award and Associate Professor **Matt Kiefer** won the faculty community service award. Both worked on *El Proyecto Bienestar*, a community-based research project in the Yakima Valley.

Rosie Schaffer, manager of the Environmental Health Laboratory, won the department's distinguished staff award this year. Other nominees were **Catherine Alexander, Ly Pham, Rory Murphy, Lynn Fritzen, Marc Beaudreau, Jacqui Ahmad, Mark Davey, Karen Powers, Quyen Dao, Keli Bort, Jerry Gluck, Terri Smith-Weller**, and the **PNASH team**.

Fiscal supervisor **Becky Rooney** was nominated for the UW Distinguished Staff Award and Professor **Mike Morgan** was nominated for the UW Distinguished Teaching Award.

At the DEOHS graduation, later that day...

Undergraduate student **Christopher Diangco** was our first **Jack Hatlen** scholarship winner. Associate Professor **Bill Daniell** was named the outstanding faculty mentor of the year by the department's graduate students. ■

ALTERNATIVES TO ANIMAL EXPERIMENTS

Professor Elaine Faustman received the 2007 North American Animal Welfare and Alternatives Award in recognition of her development of *in vitro* systems for evaluating environmentally and occupationally active agents.

The Humane Society of the United States and Procter & Gamble established the award to recognize contributions to the development of alternative methods in toxicology that reduce animal use in research. Each year, they present two awards with the objective of making animal testing for consumer products unnecessary.

Faustman's work has focused on developing new *in vitro* models for evaluating developmental and reproductive toxicity. The \$25,000 award will be applied to a research project focused on the further refinement of a new 3-D Sertoli cell/gonocyte co-culture model through the use of genomic and nanotechnology methods.

She is a professor of Toxicology and director of the Institute for Risk Assessment and Risk Communication.

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COMMUNICATION

DIRECTOR

Kathy Hall

CONTRIBUTING

EDITOR

Adrienne Hidy

DESIGNER &

ILLUSTRATOR

Cathy Schwartz

EDITORIAL

ASSISTANTS

Jennifer Gill

Karen Hanson

WEB DESIGNER

Ly Pham

DEPARTMENT

CHAIR

David A. Kalman

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Environmental Health News
Box 357234
Seattle, WA 98195-7234
Phone: 206-685-6737
E-mail: kjhall@u.washington.edu

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Department of Environmental and Occupational Health Sciences
Box 357234
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