

Northwest Center for Occupational Health and Safety Education and Research Center

Summary Annual Report
July 1, 2007 – June 30, 2008

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The Northwest Center for Occupational Health and Safety is dedicated to preventing disease and injury among the workers in Washington, Idaho, Oregon and Alaska, through strong research-based graduate education, continuing education for practicing professionals and outreach and services to the region. Each of our academic programs remain strong, with supported trainees numbering twelve in Industrial Hygiene, six in Occupational Health Nursing, three in Occupational and Environmental Medicine, two in Health Services Research Training, and four in Hazardous Substances Academic Training. During the reporting period we graduated three students with an MS in IH, one with a PhD in IH, three with an MPH in OEM, five with an MN in OHN, one with a PhD in OHN, one with an MS in HSAT, and two with a PhD in HSRT.

Center Administration, Program Director: Noah Seixas

The Northwest Center for Occupational Health and Safety (NWCOS), housed within the Department of Environmental and Occupational Health Sciences at the University of Washington, is guided by a ten-member External Advisory Board.

We have continued to monitor several objective “Measures of effectiveness.” Our accomplishments are summarized in the following table below showing the number of various indices achieved during the reporting year, compared to the annual goals we previously established.

Figures show “Achieved/Goals” for report year July 1, 2007-June 30, 2008

	IH	OHN	OMR	HSRT	HSAT
Number of Core Faculty	8	5	12	4	5
Information Dissemination by Core Faculty					
# Peer Reviewed Publications	24/15	10/10	18/33	18/15	28/8
# Reports/Chapters/Lay Pubs	3/4	3/3	0/5	0/3	3/1
# Research New Grants/Contracts	14/6	7/4	13/6	2/5	8/2
Knowledge Transfer					
# Consultations with outside Groups	10/4	25/5	29/11	2/3	6/4
# Presentations to Regional Conferences	17/9	12/6	52/8	2/2	1/2
Training					
# Trainees enrolled (total)	22/18	8/12	6/6	3/3	11/8
# Graduates	8/7	2/6	5/3	0/1	7/4
# Minority Trainees enrolled	1/3	3/2	2/1	0/1	1/2
# Research papers by trainees published	7/5	0/2	0/2	3/2	2/3
# Conference presentations by trainees	5/9	3/4	1/4	1/4	6/4

Our programs performed very well, and achieved most of our goals. Our publication record is excellent and the programs are competing successfully for research grants and contracts. We provided extensive consulting and presentations with outside groups – primarily within the region. Our enrollment and graduation rates were solid, and students have been highly successful in presenting their work at conferences. Overall, the programs performed very highly.

Interdisciplinary training remains a hallmark of our programs, bringing together students and practitioners in IH, OHN, OEM, and the other allied professions in academic classes, conferences, seminars, and research teams. In addition, all of our research-oriented trainees participate in research ethics training through the Biomedical Research Integrity seminar series.

Highlights of each program’s activities are provided, below.

Industrial Hygiene, Program Director: Michael Yost

The Industrial Hygiene ERC training program maintains a strong national presence in research and research training to complement its commitment to graduate education of industrial hygienists with career ambitions in industry and government. The program implemented its modernized curriculum as recommended by our

outside advisors, the core faculty and the most recent NIOSH site review. ENVH 557 "Exposure Controls" was offered in revised form to include content in the use of protective equipment along with rigorous training in ventilation. Content in ENVH 564 "Recognition of Health & Safety Problems" has been strengthened to include more on physical agents. A new course ENVH 551 "Principles of Exposure Science" was taught in fall quarter of 2007; this required class provides an introduction to exposure assessment methods for all students enrolled in the program.

Several students presented research findings at regional and national conferences, and two students won scholarships from the AIHA. Professor Richard Fenske received the NIOSH Director's Award for Research Excellence for his sustained research program on pesticide exposures among farmers and their families. Dr. Noah Seixas delivered the UW School of Public Health's Distinguished Faculty Lecture, addressing the evolution of exposure assessment strategies.

Occupational Health Nursing, Program Director: Arnold (Butch) de Castro

OHN core course (NCLIN 554 "Occupational Health Nursing: Practice Issues") was adapted and recorded for distance access via web-based online training in coordination with the ERC-funded Continuing Education Program. Dr. Butch de Castro, OHN Program Director received a University of Washington KL2 Clinical Research Career Development award funded by the NIH to support intensive mentored research over the next five years starting July 1, 2007.

MN trainee, Suzanne Lobaton Cabrera, completed her research on a project assessing workplace health and safety concerns among nurses in the Philippines. Findings will be used to assist the Philippine Nurses Association to develop healthcare worker health and safety training, reflecting a "Research to Practice" effort. PhD trainee Susan Matt completed her doctoral dissertation which involved development of an instrument to measure nurses' attitudes toward nurses with disabilities in the healthcare workplace.

Occupational and Environmental Medicine, Program Director: Sverre Vedal

The OEM residency program received full ACGME accreditation until March 2010. Former trainee Victor Van Hee (completed June 2007) was awarded an NHLBI Cardiovascular Disease Epidemiology and Cardiovascular Health Training Program grant at the University of Washington. He was appointed to the faculty in July 2007. Spencer Olson was promoted to Medical Director at San Diego U.S. HealthWorks clinic. Graduate Enass A. Rahman assumed a post as Occupational Medicine Physician with Kaiser Permanente in Bakersfield, CA. Her patient population consists primarily of agricultural and oil industry workers. Former trainee Chris Carlsten was recruited in September 2007 to an endowed faculty position (chair in Occupational Lung Disease) at the University of British Columbia, Department of Medicine, in Vancouver, British Columbia, Canada.

Our weekly conference series expanded to record numbers, by including trainees in the large Madigan Army Hospital Preventive Medicine Program. This series continues to provide two Clinical Case Conferences and one Journal Club session per month, with additional resource speaker sessions identified to meet specific educational needs of the training program. The addition of the Madigan trainees has attracted an even greater number of faculty to our conferences than previously, with several faculty (including Stephen Hunt of the VA Medical Center) appearing specifically to discuss military Occupational and Environmental Medicine concerns.

Health Services Research Training, Program Director: Thomas Wickizer

Jenessa Graves, an incoming HSRT trainee, received the Gilbert Ommen award for academic excellence in recognition of her outstanding academic performance and research activity in the Department of Environmental and Occupational Health Sciences. These awards reflect the high caliber of students recruited into the HSRT training program. Thomas Wickizer, HSRT Program Director, was invited to give the annual 2008 Irwin E. Nacheson lecture at the Institute for Work and Health in Toronto. Dr. Wickizer will give his lecture on October 22, 2008.

Two HSRT trainees completed their doctoral training and received PHD degrees at the end of last academic year. Sarah Veal-Brice presented the poster "Not In My Job Description: Characteristics of Unreported Workplace Violence," at the 2007 Annual Meeting of the American Public Health Association, Washington DC, November 2007.

NORA Research Training, Program Director: Noah Seixas

The NORA research projects funding mechanism was changed and has become a Pilot/Small Project Research Training Program. The PSPRTP funded three projects:

- "Occupational Health and Safety of Cedar Block Cutters on the Olympic Peninsula." A community-based research project to identify and prioritize the occupational health and safety issues faced by cedar block cutters working on the Western Olympic Peninsula was conducted by Joseph Campe, an MPH student in Community-Oriented Public Health Practice working under Dr. Matthew Kiefer;
- "Protecting Auto Body Painters From Work-Related Asthma." A study conducted by Industrial Hygiene doctoral student Diana Ceballos, to develop a permeation panel for field-testing protective clothing for auto body painters exposed to hazardous chemicals, particularly diisocyanates, used in paint systems, under the direction of Dr. Michael Yost;
- "Efficacy of Two Methods for Surveillance of Occupational Injuries Among Seattle-Area Day Laborers." A project by MPH graduate student Sarah Lowry, to develop injury surveillance systems for retrieving information addressing the high injury rate among day laborers in the Seattle area, under the supervision of Dr. Noah Seixas.

Two doctoral students received NORA traineeships: Diana Ceballos in Industrial Hygiene and Kelly Stumbaugh in Hazardous Substance Academic Training. In addition the NORA program provided support for Laura Gold's epidemiology dissertation on the relationship between occupational exposure to chlorinated solvents and multiple myeloma.

Hazardous Substance Training, Program Director: Steven Hecker

One new course was offered: Chemical Reactivity Hazards: Laboratory Scale Recognition & Control, May 13 and 14, developed and delivered by the Process Safety Alliance (a cooperative project with the American Chemical Society, OSHA, and the American Institute of Chemical Engineers), quickly filled the first session and attracted 43 attendees. The response indicated that this is a much needed course.

The HST program has benefited from the new marketing and needs assessment efforts. We continue to use the NIEHS Worker Education and Training Program grant activities to identify hazardous materials training needs among tribes in Region 10 and to recruit appropriate personnel in those tribes into our HST courses.

Hazardous Substance Academic Training, Program Director: John Kissel

Two new students were supported in the HSAT curriculum, while advanced trainees in the program, Leslie Leggett and Kelly Stumbaugh gave presentations this year at national conferences. Ms. Leggett presented at two conferences on her work on waterborne microbial disinfection techniques, and Kelly Stumbaugh presented her research on uptake of organochlorines through skin, at national conferences.

Continuing Education/Outreach, Program Director: Steven Hecker

Sixty-two courses serving 3,681 trainees have been delivered (not including HST courses). About 78% of the trainees have taken online training. The year concluded with the Safe Patient Handling Conference which featured 12 speakers and drew 14 sponsors and exhibitors and 172 attendees. Occupational Medicine Grand Rounds continue to be highly successful events, recruiting nationally recognized speakers to our series and bringing them to department seminars and other University medical programs. Interest continues to grow in Accident and Incident Investigation which attracted 63 attendees in Seattle February 27 and will be followed by an advanced course next February.

The NWCOHS CE program conducts ongoing needs assessment through surveys completed by students in existing classes, and mail-in and web-based surveys of Region X OSH professionals. Two of the past year's programs developed directly from discussions with board members. CE participates in planning of the NOHC and the Washington Governor's OSH Conference, so that course topics can be developed from stakeholder needs. During this year in collaboration with our partners at PSU and OHSU we administered a needs assessment survey at several of safety conferences in Oregon, Washington and Alaska, and used the 400+ completed surveys in designing the 2008-09 program.