When Paul Revere set out to warn colonists of the approach of British troops, his communications network consisted of lanterns, a bell tower, a horse and his voice. Of course, today, our options for communication and networking are much more diverse, and this was the topic that interested attendees of the CROET Health and Safety Symposium, “Innovative Communications & Messaging”, held June 3, 2011 at the NECA/IBEW Training Center in Portland, OR.

Here’s an example of what conference attendees heard:

In his keynote presentation, “Social Media and Occupational Safety and Health - Building our Community of Practice”, Max Lum, EdD, Office of the Director, NIOSH-CDC, pointed out that knowledge and influence reside in communication networks. Therefore, if modern communication networks — what we call social media — influence people’s decisions today, how can an agency such as NIOSH,
with vast information resources, use social media to disseminate information and thereby positively influence behavior decisions in the workplace arena?

Google, web blogs, My Space, Facebook, YouTube, Flickr, Wikipedia and Twitter, only a small sample of the communications resources available to organizations and individuals, were discussed. For example, Dr. Lum pointed out that Google is the “New Yellow Pages”, and Google searches frequently bring in hundreds of pages of search results. Therefore, how your organization is ranked is important, because the majority of people never read past the first page of search results. And the fact is, the more keyword-rich content you generate, the more search engines such as Google will find you and rank you at or near the top.

Blogs were also shown by Dr. Lum to be an effective means of conveying information, because 77% of web users read blogs. Dr. Lum told attendees that NIOSH brought in a whole new network of readers who tune into blogs, such as the NIOSH Science Blog (400,000+ views). Blogs have helped NIOSH link its science with a “product”, which drives readers to the NIOSH website, provides regular, fresh and relevant scientific information, and elicits rapid feedback.

Twitter is another notable example of social media being used by NIOSH. Dr. Lum made the point that Twitter offers an exchange of ideas and information on an unprecedented scale. NIOSH has 105,000 followers on its Twitter account, which results in a huge reach to other web users, because followers often “re-tweet” NIOSH information to friends who may be members of entirely different Twitter communities. This produces a message multiplier effect that greatly expands the audience NIOSH is trying to reach.

Several other great speakers presented their perspectives on messaging in the modern era. If you were not fortunate enough to attend the symposium, you can still access their talks by visiting the CROET website at [http://www.ohsu.edu/xd/research/centers-institutes/croet/outreach/health.cfm](http://www.ohsu.edu/xd/research/centers-institutes/croet/outreach/health.cfm). Below is a list of symposium speakers and the titles of their talks:

### Morning Session
8:00-8:30 | Registration & Refreshments
8:30-8:40 | Welcome
Ryan Olson, PhD
Assistant Scientist, CROET, OHSU
8:40-9:30 | Relative Effectiveness of Training Methods: Comparative Results from Meta-analyses of the Workplace Safety Training Literature
Rommel Salvador, PhD, Assistant Professor, Mitgard School of Business, University of Washington, Tacoma, WA
9:30-9:45 | Break
9:45-10:45 | Building our Community of Practice: Is My Space Really our Space?
Max Lum, EdD, MPA
Consultant Communication and Research Translation, Office of the Director, NIOSH-CDC, National Institute for Occupational Safety and Health (NIOSH), Washington, DC
10:45-11:30 | Safety Communications and Mobile Devices
Ryan Olson, PhD
Assistant Scientist, CROET, OHSU
11:30-12:15 | Lunch

### Afternoon Session
12:15-1:00 | Science Messaging in the Internet Era: A Case Study
Dede Montgomery MS, CIH, Occupational Safety and Health Specialist, CROET, OHSU
Melanie Mesaros, Public Information Officer, Oregon OSHA, Salem, OR
1:00-1:45 | Diffusion of Occupational Safety and Health Innovations
James Dearing, PhD, Institute for Health Research, Co-Director, Center for Health Dissemination and Implementation Research, Director, CRN Cancer Communication Research Center, Denver, CO
1:45-2:00 | Break
2:00-3:00 | Case Studies
Successes with Twitter
Lise Harwin, Communications Director, American Red Cross - Oregon Trail Chapter
Challenges, Rewards and Messages in Training Construction Pre-Apprentices
Steve Hecker, MSPH, Senior Lecturer, Director of Continuing Education, University of Washington, Seattle, WA
Communication within a Construction Firm: A Collaboration between Colorado State University and Temp-Control Mechanical
Tony Barsotti, MA, CSP, ARM, Corporate Safety Professional, Temp-Control Mechanical
3:00-3:30 | Panel Q and A
All Speakers
Top 25 Article Published by CROET Scientists

CROET scientists Drs. Diane Rohlman and Kent Anger, and former CROET scientist Pam Lein of the Department of Molecular Biosciences at the UC Davis School of Veterinary Medicine, have published an article in the journal NeuroToxicology that has become among the top 25 most cited articles for the period of January through March 2011. The article reviews evidence of a link between reduced neurobehavioral performance and biomarkers of chronic organophosphorous insecticide (OP) exposure. The authors concluded that the biomarkers used to identify damage due to acute or short-term exposure are not effective in identifying damage due to years of exposure. Therefore, future research needs to rigorously test the relationships between neurobehavioral performance and both currently used and novel biomarkers using human and animal models. The results of such studies are critically important because OP pesticides are widely and extensively used throughout the world, including situations where exposure controls and personal protective equipment are not routinely used.

Correlating neurobehavioral performance with biomarkers of organophosphorous pesticide exposure.
Rohlman, D.S.; Anger, W.K.; Lein, P.J.
NeuroToxicology, Volume 32, Issue 2, 1 March 2011, Pages 268-276

SHIFT Program Awarded 5-Year Grant

Dr. Ryan Olson and collaborators at OHSU, Portland State University, and the Kaiser Permanente Center for Health Research were recently awarded a five-year grant to measure the effectiveness of an intervention for truck drivers called SHIFT (Safety and Health Involvement for Truckers). The sponsor of the research project is the National Heart, Lung and Blood Institute, part of the National Institutes of Health (NIH). SHIFT, which was featured in Volume 15(2) of this newsletter (http://www.ohsu.edu/xd/research/centers-institutes/croet/about/publications.cfm), is a weight loss and health promotion program for truck drivers, but the intervention approach can be adapted for other types of workers who spend a lot of time alone. In the SHIFT program, drivers compete in virtual teams to make healthful behavior changes and lose weight, and are rewarded for both training completion and achievement. Please visit the shift website at http://www.ohsushift.com for more information!
CROET Well Represented at 2011 OAS Meeting

CROET scientific achievement was heavily represented Saturday, February 26th, 2011 at Portland Community College – Sylvania, host to the 70th Annual meeting of the Oregon Academy of Science (OAS). OAS (http://www.oas.pdx.edu) promotes scientific research and education in Oregon, and the annual OAS meeting acknowledges contributions by outstanding university and K-12 educators demonstrating dedication to the advancement of science education. Listed below are titles of presentations contributed by CROET scientists graduate students, and collaborators — congratulations to all who participated! You can download a PDF of the full abstracts of these presentations at: http://www.oas.pdx.edu

OREGON COMMERCIAL CRAB FISHERMEN SAFETY SURVEY AND PFD EVALUATION. Gary Rischitelli¹, Erika Zoller¹, Janice Camp², Gerry Croteau², Marty Cohen². ¹Center for Research on Occupational and Environmental Toxicology, Oregon Health & Science University, Portland, OR 97239. ²Field Research and Consultation Group, University of Washington, Seattle, WA 98105.

DEVELOPMENT AND RELIABILITY OF A SAFETY AND HEALTH ASSESSMENT TOOL FOR HOME CARE WORKERS. Ryan Olson¹, Brad Wipfli¹, Rob Wright², Layla Garrigues³, David Meier¹. Center for Research on Occupational and Environmental Toxicology, Oregon Health and Sciences University, Portland, OR 97239, ²Department of Psychology, Western Oregon University, Monmouth, OR, ³School of Nursing, Johns Hopkins University, Baltimore, MD.

PESTICIDE SAFETY TRAINING IN AN AGRICULTURAL COMMUNITY: TRENDS IN PERFORMANCE. Andrew Kirk, Tara Moomey, W. Kent Anger, Cassandra Dinius, Nick Classen, Diane S. Rohlman, Center for Research on Occupational and Environmental Toxicology, Oregon Health and Science University, Portland, OR.

DOMESTIC VIOLENCE AND WORKPLACE SUPPORT. Kendra Evans¹, Nancy Glass², Nancy Perrin³, Ginger Hanson², Nancy Glass³, W. Kent Anger¹. ¹Center for Research on Occupational and Environmental Toxicology, Oregon Health and Science University, Portland, OR, 97239; ²Kaiser Permanente Center for Research, Portland, OR, 97227; ³School of Nursing, Johns Hopkins University, Baltimore, MD.

PROTECTIVE LEAVE LAW: IS IT PRACTICAL FROM A VICTIM’S POINT OF VIEW? Cassandra Dinius¹,², Naima Laharnar¹, Nancy Glass³, Diane S. Rohlman¹, W. Kent Anger¹. ¹Center for Research on Occupational and Environmental Toxicology, Oregon Health and Sciences University, Portland, OR, ²Department of Psychology, Oregon Health and Sciences University, Portland, OR, ³School of Nursing, Johns Hopkins University, Baltimore, MD.

HEALTH BELIEFS OF AN AGRICULTURAL COMMUNITY. Andrew Nilsen, Elliot Hohn, Tara Moomey, Lindsay Nakashii, Naima Laharnar, Kendra Broadwater, Gwen Schulze, Silvia Huszar & Diane Rohlman. Center for Research on Occupational and Environmental Toxicology, Oregon Health & Science University, Portland, OR 97219.
CROET Exhibits at 2011 Northwest Ag Show

The Northwest Agricultural Show, held at the Portland Expo Center January 25-27, 2011, is the premier showcase event for agriculturists throughout the Northwest US and Southwest Canada — and CROET was there to promote farm health and safety awareness. Featured at this event was an interactive display aimed at increasing awareness and understanding of pesticide labels and Material Safety Data Sheets, which are required by law to be available to any worker handling pesticides and other chemicals in the workplace. Of the many attendees who benefitted from these educational activities were teens, most of who are involved in 4H and other school-sanctioned agriculture groups. They proved adept at understanding the chemical information on pesticide labels and MSDS sheets, and were provided a valuable lesson on the importance of this information to maintaining a safe and accident-free workplace. Also on display was information provided by Oregon Young Employee Safety - O[yes] – of which CROET is a member (http://www.oregonyoungworkers.org). The mission of O[yes], simply, is to prevent young worker injuries and fatalities. O[yes] asserts that all injuries are preventable, all workers have a right to safe work and that young workers shall be treated respectfully and fairly. The Northwest Ag Show proved an ideal venue for promoting health and safety awareness to the many current and future farmers of the Northwest.

Future farmers learn how to interpret Material Safety Data Sheets, which present critically important health and safety information about workplace chemicals.

Erika Zoller, Oregon FACE Program Senior Research Associate, and Fred Berman, CROET Toxicology Information Center Director.

Rachel DeSouza, from the University of Washington, speaks with attendees about O[yes], above and below.

Fred Berman, CROET; Kristen Steigler, Program Coordinator, Oregon Public Health Division Hazardous Substances Incident Surveillance Program; and Rachel De Souza, UW
Oregon Health & Science University includes the Schools of Dentistry, Medicine and Nursing; OHSU Hospital; numerous primary care and specialty clinics; multiple research institutes and several outreach and public service units. OHSU is an equal opportunity, affirmative action institution.