A Message From the Director

The current issue of From Research to Reality profiles our safety climate research, including findings that establish the validity and reliability of scientifically developed safety climate assessment surveys. These surveys, applied in field studies, have led us to better understand safety climate and how to best measure it across a broad base of companies and worker populations.

Among LMRIS’s unique contributions, our latest research findings suggest that, even among those whose work is performed away from peers and supervisors, safety climate remains a leading indicator of safety. We have also discovered that supervisors consistently rate safety climate higher than front-line employees and that their scores are not predictive of injury outcomes.

But many questions remain. For example, is safety climate a measure, or is it an intervening variable? How does it influence behavior, and how can it be modified? Our continued safety climate research aims to explore these and other questions with the goal of developing targeted and effective interventions.

As always, we invite your feedback on our latest research and news developments.

Ian Noy, Ph.D.
Vice President and Director, LMRIS

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Pransky Recognized for Occupational and Environmental Medicine Achievements

The American College of Occupational and Environmental Medicine (ACOEM) awarded Center for Disability Research (CDR) director Glenn S. Pransky, M.D., M.Occ.H., the 2015 Health Achievement in Occupational Medicine Award. This award recognizes Dr. Pransky for his leadership in the field of occupational and environmental medicine and work disability research at the Liberty Mutual Research Institute for Safety.

Dr. Pransky’s research includes disability prevention and prognosis of work-related musculoskeletal disorders, work disability in older workers, and enhancing the return-to-work process. He received the award in May at the annual American Occupational Health Conference in Baltimore.

New Research Scientists Join Staff

Veronica Miyasike-daSilva, Ph.D., and Bahar Sharafi, Ph.D., recently joined the scientific research staff at LMRIS. Dr. Miyasike-daSilva brings a research background in posture and gait, mobility, eye tracking and aging to the Institute. A University of Waterloo graduate with a Ph.D. in kinesiology, her research focuses on the visual and cognitive processes involved with posture and locomotion control. Her studies will contribute to knowledge, programs and strategies to reduce falls and promote safe mobility in workplaces, homes and the community.

Dr. Sharafi earned her Ph.D. from the University of Virginia, Department of Mechanical and Aerospace Engineering. Prior to joining the Institute, she explored underlying motor control and neurophysiological mechanisms of balance control deficits after a stroke. She also developed musculoskeletal simulations to study how muscles contribute to balance recovery during walking. Her research interests include neuromuscular control, muscle mechanics, aging and neurological injury. Dr. Sharafi applies engineering methods to biological questions related to human movement while investigating environments that challenge stability.

“We’re excited to have Drs. Miyasike-daSilva and Sharafi join us,” says Jeffrey M. Schiffman, Ph.D., director of the Center for Physical Ergonomics. “Their expertise and passion will help facilitate and grow our research interests that are related to slips, trips and falls. Falls are a considerable injury issue in both occupational and nonoccupational settings.”
Winning Paper Discusses Action Research in Human Factors Engineering

Researchers from Ryerson University, Toronto, Canada, won the 2015 Liberty Mutual Best Paper Award for their research paper, “An ergonomics action research demonstration: integrating human factors into assembly design processes” (Ergonomics, Vol. 57, No. 10, pp. 1574-1589, 2014). The research supports early integration of human factors in organizational design processes. The paper describes an action research study in ergonomics in which the researcher participates in the iterative organizational design while simultaneously considering further actions to promote learning for both the organization and the researchers.

The winning researchers from Ryerson University include Judy Village, Ph.D., CCPE, Human Factors Engineering Lab research associate; Michael Greig, MA.Sc., industrial engineering graduate student; Filippo A. Salustri, Ph.D., P.Eng., Mechanical Engineering Department professor; Saeed Zolfaghari, Ph.D., P.Eng., industrial engineering professor, and W. Patrick Neumann, Ph.D., Eur. Erg. Department of Mechanical and Industrial Engineering associate professor.

News and Notes

Research Scientist Yueng-Hsiang Huang, Ph.D., was elected a Fellow of the Society for Industrial and Organizational Psychology (SIOP). Fellows are distinguished industrial and organizational psychologists who make an unusual and outstanding contribution to the field. The society recognized Dr. Huang for her efforts in bringing together various disciplines (e.g., ergonomics, epidemiology and human factors) and industrial/organizational psychology in her occupational safety and health research. She received the honor at the SIOP 30th Annual Conference in Philadelphia, Pennsylvania in April.

The Research Institute received honorable mention for the Best Intervention Award at the 11th International Conference on Occupational Stress and Health. The award recognizes outstanding evaluations of the best interventions that partner researchers with industry and/or labor to prevent occupational injuries and illnesses and to promote safety and health at work. The Institute was recognized for scientific work in investigating the effects of an office ergonomics intervention. Research Scientist Michelle M. Robertson, Ph.D., CPE, principal investigator, accepted the award and also presented the winning paper.

The International Commission on Occupational Health (ICOH) elected Research Scientist William S. Shaw, Ph.D., P.E., as secretary of the ICOH Work Disability Prevention Scientific Committee. The committee supports international dialogue among researchers who study return-to-work and other work disability prevention strategies. One of the primary responsibilities of the committee is to organize a biannual international conference to highlight, discuss and foster new research in this area. Dr. Shaw will serve a three-year term, from 2015 to 2018.
**Recent Publications**


**Recent Conferences**

Population Association of America: April 29-May 2, San Diego, California
- Examining sedentary work and weight gain prospectively: Evidence from NLSY79 – Tin-chi Lin, Ph.D.

Work, Stress and Health Conference 2015: May 6-9, Atlanta, Georgia
- Assessing the relationship between chronic health conditions and productivity loss trajectories – Elyssa Besen, Ph.D.
- Good safety climate alone may not be enough: impacts of climate variability on safety behavior – Jin Lee, Ph.D.
- A sociotechnical systems approach to examining safety climate in the trucking industry – Michelle M. Robertson, Ph.D., CPE
- MANAGE AT WORK: A self-management group intervention for workers with chronic physical health conditions – William S. Shaw, Ph.D., P.E.
- Work-related factors considered when forming expectations for returning to work • Manager experiences with the return-to-work process in a large, publicly funded hospital setting: Walking a fine line – Amanda E. Young, Ph.D.

EPRI 2nd Annual Occupational Health & Safety Meeting Conference: May 19-20, Charlotte, North Carolina
- Development and validation of safety climate scales for mobile remote workers using utility/electrical workers as exemplar – Yueng-Hsiang Huang, Ph.D.

National Occupational Injury Research Symposium: May 19-21, Kingwood, West Virginia
- Factors affecting the utilized coefficient of friction on slippery surfaces – Wen R. Chang, Ph.D.
- Slipperiness perception and future risk of slipping – Theodore K. Courtney, M.S., CSP
- The technological transformation of driving: lessons learned in the transition from horse and buggy to internal combustion engine – Marvin J. Dainoff, Ph.D.
- Association between sedentary work and BMI in a US national longitudinal survey – Tin-chi Lin, Ph.D.
- The impact of shift starting time on sleep duration, sleep quality, and alertness prior to injury in the People’s Republic of China – David Lombardi, Ph.D.

• Differences in work and lifestyle schedules which may be associated with an elevated risk of injury for multiple job holders compared with single job holders: Findings from the American Time Use Survey – Helen R. Marucci-Wellman, Sc.D.

• Duration of slip-resistant shoe usage and the rate of slipping in limited-service restaurant workers: Results from a prospective and crossover study – Santosh K. Verma, Sc.D., M.D., M.P.H.

American Industrial Hygiene Conference and Exhibition: May 30-June 4, Salt Lake City, Utah

• Sitting time, obesity, and injury at work – Theodore K. Courtney, M.S., CSP

22nd International Symposium on Shiftwork and Working Time Society: June 8-12, Elsinore, Denmark

• Impact of work hour limitations on worker and patient safety in US healthcare – David A. Lombardi, Ph.D.

• Differences in sleep time when adding a second job: Findings from the American Time Use Survey – Helen R. Marucci-Wellman, Sc.D.