

# Occupational Health and Safety

## RESEARCH DAY – WINTER 2026

Join us on February 12<sup>th</sup> from 12:00 p.m. – 1:15 p.m. to take part in Research Day!

The Ministry of Labour, Immigration, Training and Skills Development (MLITSD) and the Workplace Safety and Insurance Board (WSIB) have partnered to highlight and showcase two funded research projects focused on **the use of emerging technology to assess and prevent workplace injury**.

This virtual event is an opportunity to learn more about occupational health and safety research and offers a chance to ask questions directly to the researchers during our Q&A periods.

The featured research projects are:

**Dr. Steven Fischer** (CRE-MSD, University of Waterloo)

*From Pixels to Prevention: Advancing Computer Vision to Assess Ergonomic Hazards in the Workplace*

Dr. Fischer will present findings from his research project which explored how single-camera CV systems can be leveraged to produce reliable, scalable, and automated ergonomic hazard assessments—bridging the gap between laboratory-grade motion capture and real-world field application. The presentation will identify how factors such as camera placement, model architecture, and movement pace affect the accuracy of pose-estimated trunk inclination, shoulder elevation, and lifting parameters critical to inform the use of established tools like the Revised NIOSH Lifting Equation (RNLE).

**Dr. Arif Jetha** (Institute for Work and Health)

*Artificial intelligence and occupational injury and illness in Ontario: Implications for prevention and recovery*

Dr. Jetha will present findings from his research project which explored the role of artificial intelligence (AI) in occupational health and safety (OHS), focusing on how AI can be leveraged to prevent workplace injury and illness. The presentation will identify priority areas where AI has potential, such as: predictive analytics for injury risk, hazard detection, fatigue monitoring, mental health support, automation of high-risk tasks; and highlight barriers to adoption, such as: cost, data quality, trust, lack of regulation, ethical risks. The presentation will also highlight how OHS stakeholders can support safe AI adoption.

[REGISTER TO ATTEND](#)

You can learn more about the featured researchers and event moderator below.



Dr. Paul Demers - Moderator

Dr. Paul Demers is the scientific director of the Occupational Cancer Research Centre (OCRC) in Toronto, based at Ontario Health, where he is also a senior scientist in prevention, screening and cancer control. He is also a professor with the Dalla Lana School of Public Health at the University of Toronto and a clinical professor with the School of Population and Public Health at the University of British Columbia. Demers is internationally recognized for his expertise on the health effects of workplace exposures and sits on many expert panels, including the International Agency for Research on Cancer (IARC) working groups that evaluated carcinogens such as dusts and fibres, firefighting and talc.



Dr. Steven Fischer

Dr. Steven Fischer is Canadian Certified Professional Ergonomist, Registered Kinesiologist in the province of Ontario and an Associate Professor and Director of the Occupational Biomechanics and Ergonomics Lab in the Department of Kinesiology and Health Sciences at the University of Waterloo. He also serves as the Associate Director, Research for the Centre of Research Expertise for the Prevention of Musculoskeletal Disorders (CRE-MSD). Dr. Fischer has published over 100 peer-reviewed papers, holds 2 US Patents, and has trained more than 75 students where past trainees are now employed with companies including Ford Motor Company, Tesla, Amazon, AWS, Puma, Sunlife Assurance Company, among others.



Dr. Arif Jetha

Dr. Arif Jetha is associate scientific director and scientist at the Institute for Work & Health. He is also an associate professor (status-only) at the University of Toronto's Dalla Lana School of Public Health. Dr. Jetha's program of research aims at understanding how sociopolitical, technological, environmental and economic changes that characterize the future of work affect the health and employment participation of vulnerable workers including young workers and persons living with disabilities. He is specifically interested in the implications of artificial intelligence (AI) on the health, safety and well-being of workers. In 2025, he became the director and principal investigator of the Partnership on AI and the Quality of work (PAIQ), a 7-year partnership project to study artificial intelligence (AI), job quality and worker wellbeing.