

Twenty five years
of making a difference

TWENTY

KEE




Institute
for Work &
Health

08	32
Making a difference to injury and illness prevention	The origins of IWH and milestones
18	38
Making a difference to rehabilitation and return to work	The people making a difference
26	42
Making a difference to the field of work and health research	Auditors' report and financial statements
29	48
Making a difference through knowledge translation and exchange	Governance
30	
A message from the Chair and the President	

“For 25 years, IWH has been the go-to research agency for information on occupational health and safety, disability management and workers’ compensation. It has earned an exceptional reputation nationally and internationally, and maintained a high degree of credibility in fields in which information is commonly contested.”

Tony Dean

[former] Deputy Minister, Ontario Ministry of Labour, Chair, 2010 Expert Advisory Panel on Occupational Health and Safety, Secretary of the Cabinet, Ontario

A person is sitting on a balcony, looking out over a city at dusk. The person's legs and feet are visible in the foreground, wearing dark shoes and light-colored trousers. The balcony railing is white. In the background, a cityscape is visible with buildings and lights, and a large body of water in the distance. The sky is a mix of blue and orange, suggesting sunset or sunrise. The overall scene is peaceful and contemplative.

SINCE ITS BEGINNINGS IN 1990, the Toronto-based Institute for Work & Health (IWH) has become a world leader in providing evidence-based insights into the prevention of worker injury, illness and disability—in Ontario, Canada and beyond. For 25 years, the Institute has focused on a single mission: to promote, protect and improve the safety and health of working people by conducting actionable research that is valued by employers, workers and policy-makers.

A man in a light-colored suit and glasses is seated in a blue airport-style chair, working on a laptop. He is looking down at the screen with his hand to his chin, appearing thoughtful. The background shows a blurred airport tarmac with several airplanes. The scene is lit with soft, natural light from a window.

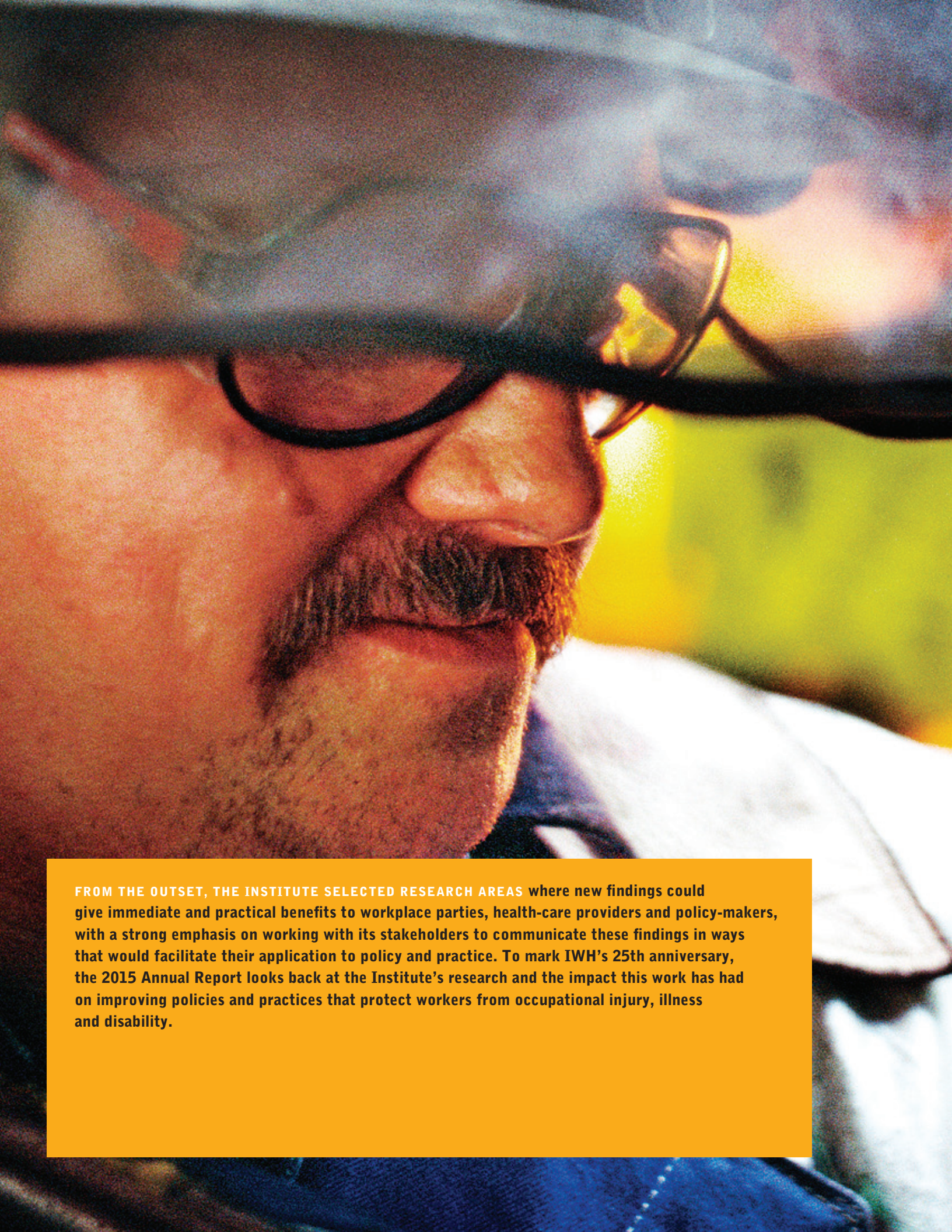
ACTIONABLE RESEARCH



EXCEPTIONAL REPUTATION



INSTITUTE RESEARCHERS HAVE CONTRIBUTED IMPORTANT and applicable findings in the diverse contexts that affect workplace health and safety. In doing so, IWH has earned provincial, national and international recognition for its substantive and methodological contributions to a wide range of research areas—from musculoskeletal disorders to vulnerable workers, from return to work to workers' compensation, from workplace prevention practices to occupational health and safety regulations and incentives.



FROM THE OUTSET, THE INSTITUTE SELECTED RESEARCH AREAS where new findings could give immediate and practical benefits to workplace parties, health-care providers and policy-makers, with a strong emphasis on working with its stakeholders to communicate these findings in ways that would facilitate their application to policy and practice. To mark IWH's 25th anniversary, the 2015 Annual Report looks back at the Institute's research and the impact this work has had on improving policies and practices that protect workers from occupational injury, illness and disability.



PRACTICAL BENEFITS



A photograph of a commercial kitchen. In the foreground, a large stainless steel pot sits on a gas stove. The background features a stainless steel backsplash with significant splatter and staining, particularly on the left side. The lighting is somewhat dim, with a warm glow from the stove area.

MAKING
A DIFFERENCE

to injury and
illness
prevention

PREVENTING MUSCULOSKELETAL DISORDERS

In 1990, the single largest class of work-related health problems in the Ontario workforce was musculoskeletal disorders (MSDs). This remains true today. MSDs are injuries or pain in the body's joints, ligaments, muscles, nerves, tendons, and structures that support the limbs, neck and back.

Because people with MSDs often display no visible signs of injury, a debate was taking place in policy circles during the Institute's early years as to whether or not MSDs were caused by exposures arising at work. IWH research played an important role in helping to establish this link.

One of the Institute's initial research priorities was to study low-back pain and other MSDs in the workplace. Its first workplace-based project, conducted from 1993 to 1996, was the largest case-control study at that time. It explored the role of both physical and psychosocial work-related factors in the development of disabling low-back pain among Canadian Auto Worker (CAW) members employed at the General Motors car and truck assembly plant in Oshawa.

This research, designed in collaboration with colleagues at the University of Waterloo, was one of the first international studies to demonstrate clearly that physical loads in a modern manufacturing operation directly contribute to low-back pain. In light of this and other research, several North American jurisdictions, including British Columbia, Washington State and California, adopted regulations requiring employers to formally assess workloads and, if these loads exceeded standards, to act to reduce physical work demands.

With conditions of work established as a cause of MSDs, the Institute turned its attention to the design of workplace practices to prevent MSDs in the first place. A major

six-year study at the *Toronto Star* newspaper showed that an ergonomics program could reduce frequent and severe pain among office workers with repetitive strain injury.

The project involved representatives from the newspaper's management, the Southern Ontario Newspaper Guild, the on-site physiotherapy clinic, and scientists and researchers from IWH, the University of Waterloo and York University in Toronto. The results showed that both physical factors (including keyboard set-up and mouse position) and workplace organizational factors (such as social support at work) needed to be addressed to reduce the burden of work-related musculoskeletal disorders.

As a member of the Occupational Health and Safety Council of Ontario (OHSCO)—a partnership that included the Workplace Safety and Insurance Board (WSIB), the Ministry of Labour (MOL), health and safety associations (HSAs) and workers' organizations—IWH played a pivotal role in the development and dissemination of the MSD Prevention Guideline, released in 2007. The guideline, along with a supporting resource manual and tool kit, provides a framework for employers and workers to prevent MSDs in the workplace.

Around the time the provincial MSD guideline was being developed, IWH undertook a systematic review of the literature on participatory ergonomics (PE), in which workers are engaged in the process of identifying workplace hazards related to MSDs and coming up with strategies to address these hazards. Its findings on what makes PE programs effective led to a user-friendly booklet entitled *Reducing MSD Hazards in the Workplace: A Guide to Successful Participatory Ergonomics Programs*.

The PE systematic review is one of many completed by IWH on the prevention of work-related MSDs. Another,

A woman with dark, curly hair, wearing a blue and red plaid shirt, is focused on her work in a workshop. She is holding a pair of tweezers and working on a small object. In the background, another person is visible, and there are various tools and materials hanging on the wall. A hand with a white watch is pointing towards the text overlaid on the image.

IWH research played an important role in establishing the link between work exposures and MSDs

“AT THE MINISTRY OF LABOUR, we’re proud to work with outstanding partners in the occupational health and safety system like the Institute for Work & Health. IWH has provided us with invaluable research over the years that has helped to protect and improve the health of working people across Ontario.”

Sophie Dennis

Deputy Minister, Ontario Ministry of Labour

updated in 2015, looked at the prevention of MSDs of the upper extremity (neck, shoulder, arm, elbow, wrist and hand). It found that workplace-based resistance training can help prevent and manage these MSDs.

One of the most recent IWH contributions to MSD prevention is the development of *eOfficeErgo: Ergonomics e-Learning for Office Workers*, an evidence-based and standard-compliant online training program designed for employees who regularly use computers on the job. The program was developed by IWH in partnership with the Public Services Health & Safety Association, the Centre for Addiction and Mental Health and the U.S.-based Liberty Mutual Research Institute for Safety. IWH research shows that completing the online office ergonomics training results in improved practices and postures.

PROMOTING EFFECTIVE OHS WORKPLACE PRACTICES

In the 1990s, innovative Canadian employers began to adopt comprehensive management approaches to the recognition and control of hazards that risk the health and well-being of workers. Although the research evidence for the effectiveness of occupational health and safety (OHS) management systems was limited, many employers adopted these practices as tools to improve regulatory compliance and, more importantly, as procedures for protecting the health of workers.

Standard-setting bodies, like the Canadian Standards Association (CSA), supported this trend, introducing the CSA Z1000 *Occupational Health and Safety Management Standard* in 2006. The adoption and diffusion of OHS management practices among Canadian employers may be among the more important contributors to the steady reduction in work-related injury and illness over the past two decades. Institute research has kept pace with these trends.

Since the outset, the Institute’s research findings have provided practical guidance about the workplace practices that are most effective in preventing work-related injuries and illnesses. Some of the Institute’s earliest research in this area contributed to a 1998 report to the Royal Commission on Workers’ Compensation in British Columbia on firm-level organizational practices. Drawing on the available research literature, the report found that a number of factors were consistently related to lower injury rates, including: empowerment of the workforce; encouragement of a long-term commitment of the workforce; good relations between management and workers; active role of top management; delegation of safety activities; conducting of safety audits; monitoring of unsafe worker behaviours; initial and ongoing safety training; low turnover and longer seniority; and good housekeeping.

In more recent years, the Institute’s research has focused on organizational culture, such as leading indicators of OHS performance. Leading indicators of work injury and illness are characteristics of workplaces that precede OHS outcomes. If changed, they should lead to changes in these outcomes. Leading indicators have the potential to help identify factors affecting the risk of injury, allowing workplaces to address these factors before injuries occur.

The Ontario Leading Indicators Project (OLIP) was launched by IWH in 2011. Organizations from 10 sectors—manufacturing, service, agriculture, health care, education, municipal, construction, transportation, electrical & utilities and pulp & paper—were recruited to participate by their respective health and safety association: Workplace Safety & Prevention Services (WSPS), Public Services Health & Safety Association (PSHSA), Infrastructure Health & Safety Association (IHSA) and Workplace Safety North (WSN). Through this research, IWH and the HSAs built a benchmarking database to support improvements in OHS in Ontario workplaces.

One of the survey tools that formed part of OLIP has gained a lot of attention among OHS policy-makers and practitioners in Canada and beyond, namely the IWH Organizational Performance Metric (IWH-OPM). This simple, eight-item questionnaire was developed by an IWH team working in close collaboration with Ontario's health and safety associations. When used by employers, workers and prevention partners, the IWH-OPM can point to aspects of workplace health and safety programs that may need attention, and help the workplace parties start talking about what needs to change in order to help prevent accidents and disease.

It's this ability of the IWH-OPM to act as a conversation-starter about making improvements that has particularly attracted the attention of OHS leaders across Canada. The IWH-OPM is being used by governments in New Brunswick, Prince Edward Island, Alberta and British Columbia. A slightly modified version has been developed by the Institute for Safety, Compensation and Recovery Research (ISCRR) and Monash University for use in Australia.

Another IWH project that has gained attention among OHS practitioners is the "breakthrough change" study. The research team identified Ontario firms that had made large improvements in their OHS performance over a 10-year period. According to this exploratory research, it seems that workplaces make large improvements in OHS when some type of external influence helps bring three internal factors into play: an organizational motivation to take action in OHS, the introduction of new OHS knowledge, and an engaged health and safety champion who integrates that knowledge into the organization.

The Institute has also provided important guidance to the workplace parties over the years about the evaluation of OHS interventions. For example, IWH teamed up with the U.S. National Institute for Occupational Safety and Health (NIOSH) to produce a guide for workplace

health and safety professionals (and researchers) on how to determine if their OHS programs are really working. Called *Guide to Evaluating the Effectiveness of Strategies for Preventing Work Injuries*, the 2001 publication became one of the Institute's most popular products: it was referred to as the "gold standard" for understanding evaluation methods, the *Journal of Safety Research* recommended readers get copies of the guide for themselves and colleagues, and a number of groups, including the U.S. National Safety Council, used it as a teaching tool.

The Institute made another important contribution to the evaluation of prevention interventions. In a systematic review of the literature in 2005, the research team found that very few occupational health and safety studies had also undertaken an economic analysis. The team worked to fill this gap by co-authoring the book *Economic Evaluation of Interventions for Occupational Health and Safety: Developing Good Practice*. That book led to the development of the Health & Safety Smart Planner, an IWH software tool designed to calculate the costs and benefits of workplace health and safety initiatives. Versions of the tool are in use in Ontario, Manitoba and France.

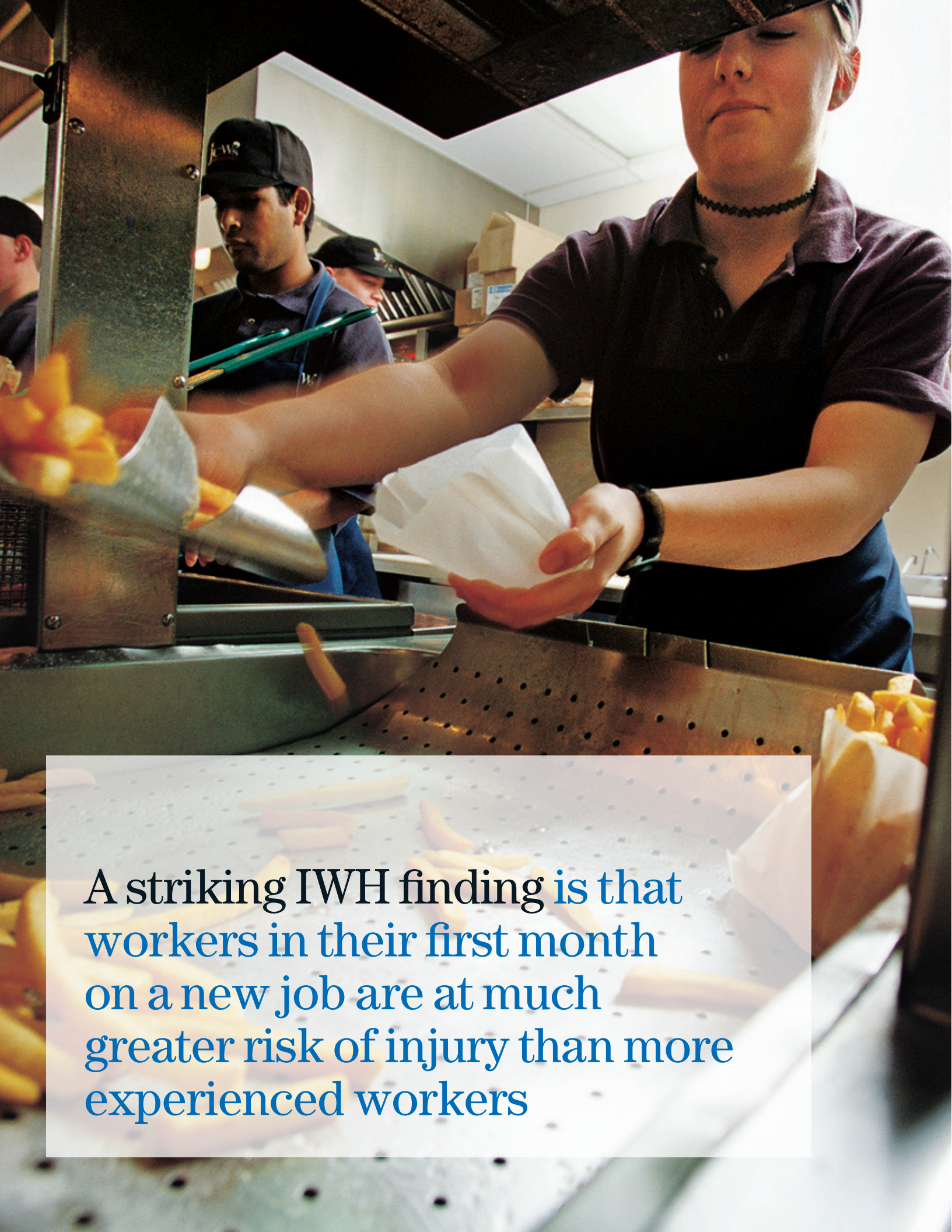
PROTECTING VULNERABLE WORKERS

Another key theme of IWH research on the prevention of work injury and illness has been the protection of "vulnerable workers." The Institute's early work in this area focused on young workers, workers new to their jobs and recent immigrants. In later years, it grew to include precariously employed workers (including temporary agency workers), workers with chronic conditions and older workers.

One of the most striking findings of this body of work is that workers in their first month on a new job have a much

"IWH research helped shape the policy ideas that emerged from the working groups and the recommendations of the Expert Advisory Panel, particularly in the areas of training, vulnerable workers and data systems."

John Vander Doelen
Special Policy Adviser, Ontario Ministry of Labour
[former] Head of Secretariat, 2010 Expert Advisory Panel
on Occupational Health and Safety



A striking IWH finding is that workers in their first month on a new job are at much greater risk of injury than more experienced workers

“WHEN IWH RESEARCH HAS A DIRECT LINK TO OUR WORK, we take notice. For example, the [findings on new workers] was landmark research, and it had an impact. We changed the wording [from ‘young’ to ‘new and young’] because of that study.”

Wayne Del’Orme

Associate Director, Western Region, Ontario Ministry of Labour

higher risk of a lost-time injury than more experienced workers. As early as 2003, IWH reported the finding that all workers, regardless of age, were at a much greater risk of injury in the first month on the job. In 2013, another IWH study updated this research and looked at injury rates over a 10-year period. Injury risk among new workers remained consistently high, with workers in their first month on the job having three times the risk of a lost-time injury as workers with over a year’s job experience.

These findings have influenced the language used throughout Ontario’s OHS prevention system in framing risk experienced by new and young workers. The Ministry of Labour, health and safety associations and other system stakeholders started to include new workers in their injury prevention initiatives originally aimed only at young workers.

For example, in 2008, the Ministry introduced a new enforcement strategy called Safe at Work Ontario. The strategy included “blitzing” Ontario workplaces to eliminate health and safety hazards, “concentrating on workplaces with workers aged 24 and under as well as those employing workers of any age who are new to their jobs.”

The IWH finding of a much higher injury risk among workers in their first month on the job was highlighted in the 2010 report of Ontario’s Expert Advisory Panel on Occupational Health and Safety. One of the Panel’s priority recommendations was to require health and safety awareness training for all new workers. This became law in Ontario when a new training regulation took effect in July 2014.

The report of the Expert Advisory Panel defined vulnerable workers as those who have “a greater exposure than most workers to conditions hazardous to health or safety and who lack the power to alter those conditions.” In responding to the Expert Advisory Panel’s emphasis

on vulnerable workers, an IWH research team developed a method for measuring OHS vulnerability that mirrors the Panel’s framework. Workers are considered “vulnerable” to occupational injury or illness only if they are exposed to hazards and lack protection in one of three areas: workplace policies and procedures; awareness of OHS hazards, rights and responsibilities; and empowerment to participate in injury and illness prevention.

This framework has been adopted by the Ontario Ministry of Labour. Its *Occupational Health and Safety in Ontario: 2014-15 Annual Report* notes that the Ontario prevention system “is using an *evidence-based framework developed by the Institute for Work and Health* [emphasis in original] to assess the extent to which workers may be vulnerable to occupational health and safety risks at work.”

In 2012, an IWH study of how temporary work agencies manage health, safety and return to work (RTW)—with a focus on low-wage workers—found temp agency workers are less protected than regular workers because of the combination of two things: the structure of injury prevention financial incentives; and the complex working relationship in which temp agency workers find themselves with two employers—the temp agency and the client employer.

This finding contributed to the development of a new provision in the *Workplace Safety and Insurance Act* to allow for a regulation (yet to be completed) to have the experience rating of workers’ compensation claims apply to the client employer instead of the temp agency. In an article by *OHS Canada* magazine, Ontario Minister of Labour Kevin Flynn indicated that IWH research helped point out the limitations of the current system: “Input from the Workers Action Centre and the Institute for Work and Health suggests that employers have been outsourcing the riskiest jobs to temporary-help agencies, the Minister added.”

IWH researchers have also conducted important studies on recent immigrants, particularly in the area of workplace injuries, illness and workers' compensation. These studies have resulted in the development of tools and resources to help prevent workplace injuries and disabilities among newcomers.

In particular, an IWH team developed a tool kit called *Prevention is the Best Medicine* to teach newcomers to Ontario about their occupational health and safety and workers' compensation rights and responsibilities. Designed to be delivered to recent immigrants who are preparing to enter the labour force, the tool kit has been used by settlement agencies in Ontario, and also adapted by Manitoba's Workers Compensation Board and Safe Work Manitoba for newcomers to that province.

PROMOTING EFFECTIVE REGULATION AND INCENTIVES

In the last two decades of the previous century, a prominent public policy perspective in many countries, particularly in the United States and the European Union, was that many regulatory standards were not effective and represented an economic burden to society. Some of the regulatory reforms arising during this period have stood the test of time. For example, the elimination of prescriptive occupational health and safety regulations, replaced with a requirement that all employers must perform regular risk assessments, has improved workplace OHS practices in the European Union.

Many jurisdictions, however, have recognized that the regulator's role in enforcement of standards is fundamentally important. Research evidence published over the past 20 years, including work by the Institute, has clearly established the effectiveness of regulatory enforcement in worker health protection.

“An IWH systematic review found strong evidence that workplace inspections with citations and penalties reduce the frequency or severity of injuries. [The review] was very helpful to the Ontario Ministry of Labour and strongly supported a decision to significantly expand the Ministry's inspection resources.”

Ed McCloskey
[former] Director, Occupational Health and Safety Branch,
Ontario Ministry of Labour

The Institute has a history of supporting the work of policy-makers in ensuring safe and healthy workplaces, including research support to the Expert Advisory Panel in 2010. Following an incident in December 2009 in which four construction workers died after the collapse of a high-rise swing stage, the Ontario Minister of Labour appointed Tony Dean, a former Cabinet Secretary and former Deputy Minister of Labour, to lead a comprehensive review of Ontario's OHS system.

IWH supported the work of the Expert Advisory Panel in several ways: preparing a set of papers describing the OHS system and delivery of prevention services in seven jurisdictions; participating in the Working Group on Data and Performance Measurement and the Working Group on Vulnerable Workers; and making several presentations to the working groups.

A 2007 IWH systematic review looked at the literature on the effectiveness of OHS enforcement strategies. In 2015, the review was updated. In both cases the research team found strong evidence that regulatory health and safety inspections that result in citations or penalties are effective in reducing work-related injuries. The 2015 review also found that general deterrence—the mere chance that employers may get inspected one day—is not as effective.

IWH research on regulatory issues has included an examination of the use of experience rating of workers' compensation claims. With experience rating, employers with higher claims costs than their peers pay higher premiums and/or surcharges, and those with lower claims costs pay lower premiums and/or receive rebates.

The research found that firms with a higher rating factor (i.e. a higher degree of experience rating) tended to have fewer lost-time claims (LTCs) and more no-lost-time claims (NLTCs) than similar firms with a lower rating factor. This suggests that the incentive may be primarily

“THE GERMAN ACCIDENT INSURANCE FUND, DGUV, annually invests more than one billion euros to improve workplace practices to protect the health of German workers. We turn to the global research evidence, including the very high quality work of the Institute for Work & Health, to support our social partners in their efforts to make German workplaces the safest workplaces in the world and to lead efforts to protect worker health around the world.”

Walter Eichendorff

Deputy Director General, German Social Accident Insurance (DGUV)

affecting secondary prevention—that is, work disability reduction—through accommodation or cost-focused management of lost-time claims, or some combination of these practices.

IWH has also assisted prevention efforts, especially in Ontario, by monitoring trends in injury data. One study found that work-related injury rates in Ontario fell by 30 per cent over an eight-year period from 2004 to 2011. In contrast, rates of injuries among working-age adults caused by leisure and other non-work activities did not decline. These findings point to the important role of workplace expenditures and investments in occupational health and safety in protecting the health of working-age adults. And because the study drew on two sets of data—emergency department visits and the Canadian Community Health Survey—it also helped call attention to the value of using these data sources to supplement information from workers’ compensation boards.

UNDERSTANDING THE WORK CONTEXT

In the past 50 years, the world of work has changed dramatically. And it will continue to change. New technologies, new markets, new services and new forms of employment and work arrangements all shape the context for the prevention of work injury and work disability. For more than 20 years, the Institute has made a commitment to support employers, worker representatives and public authorities in documenting the health risks and health benefits of the changing world of work.

Some of the Institute’s research on preventing work injury and illness focuses on better understanding the ways in which the organization of work affects health outcomes. For example, a 2012 study found that low levels of job control, defined as the ability of individuals to make decisions about the way they work or use their skills, are associated with an increased risk of diabetes among



women, but not among men. A related 2013 study found that low levels of job control are associated with an increased risk of hypertension among men, but not among women.

IWH has also explored the effects of shift work on health. Shift work—anything other than a regular daytime work schedule—makes up a large part of the Canadian economy. In April 2010, IWH and the Occupational Cancer Research Centre (OCRC) co-hosted a scientific symposium on the health effects of shift work. A key message at the symposium was that night shift work is associated with an increase in breast cancer in women who work rotating shifts for a long time (30+ years) and has been classified as a probable carcinogen by the International Agency for Research on Cancer (IARC). Another key message was that night, evening, rotating and irregular shifts are associated with an elevated risk of workplace injuries.

IWH has continued to contribute to the research on shift work. For example, a 2013 study found that the risk of work-related injury or illness varies by time of day, with an elevated risk in the evening, night and early morning periods.



MAKING
A DIFFERENCE

to rehabilitation
and return to
work



IMPROVING CLINICAL MANAGEMENT OF WORK-RELATED INJURY AND ILLNESS

In the 1990s, health-care insurance authorities, including provincial workers' compensation boards, faced a significant challenge. Many novel clinical therapies were being provided to patients with uncertain evidence for the effectiveness of these therapies. These concerns were also recognized by pioneers in the international academic medical community, who championed the principles that have come to be termed 'evidence-based medicine'. These early beginnings have led to a fundamental change in how clinicians and insurers make choices about which therapies to provide to patients. IWH was there at the beginning.

From its earliest days, the Institute has made major contributions to evidence-based practices for treating work-related health disorders, particularly the most burdensome musculoskeletal conditions: acute and chronic low-back pain, neck pain and upper extremity injuries.

The Institute was created at about the same time that the U.S. Agency for Health Care Policy and Research (now the Agency for Health Research and Quality) released its Acute Low-back Pain Guidelines. Consequently, the Institute's initial focus was on low-back pain and the diffusion of these guidelines to relevant stakeholders in Ontario. The message was new to a number of providers. The guidelines encouraged a shift away from passive therapies such as bed rest towards advice to stay active.

Meanwhile, new evidence on the treatment of back pain was rapidly accumulating, and stakeholders needed ongoing synthesis of this new evidence. In 1996, IWH sponsored the creation of the Cochrane Back Review Group (CBRG), a review group of the Cochrane Collaboration. The aim of this highly respected, international consortium was to prepare systematic reviews of the literature on the effects of health-care interventions.

CBRG, which changed its name in 2015 to Cochrane Back and Neck (CBN), became a recognized and respected source of evidence for the large number of health professionals caring for patients with neck and back pain and other spinal disorders. A number of professional bodies in Ontario turned to its evidence base to define clinical practice guidelines.

IWH helped the Physicians of Ontario Collaborating for Knowledge Exchange and Transfer (POCKET) to develop and disseminate an evidence-based tool kit on managing low-back pain, first published in 2005 and revised in 2009. The tool kit includes a CBRG-reviewed booklet for patients titled *So Your Back Hurts*, which offers evidence-based recommendations on treatments and activity levels.

IWH also helped create the Neck Pain Evidence Summary, designed for health-care professionals who treat patients with neck pain, ranging from mild pain to whiplash. The summary was based on an evidence synthesis completed in 2010 by the Bone and Joint Task Force on Neck Pain, in which several IWH staff members actively participated.

IWH has made an important contribution to research and knowledge transfer to inform sound practices on the use of opioids to relieve pain. Opioids, such as morphine, codeine and oxycodone, are addictive, potentially lethal and widely used. In 2008, Canada had the highest per capita rate of oxycodone consumption in the world, according to the International Narcotics Control Board. In Ontario, opioid-related deaths climbed to 33.3 deaths per million people per year in 2006, up from 19.4 in 2000.

In 2007, physician regulatory colleges across Canada came together to form the National Opioid Use Guideline Group (NOUGG). In May 2010, NOUGG released the new *Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-Cancer Pain*. The research behind the guideline was led by an IWH scientist, who also

A photograph of a male worker in a warehouse setting. He is wearing a light blue short-sleeved button-down shirt with a name tag that says "Dave", a tan baseball cap, and safety glasses. He is operating a yellow pallet jack, holding the handle with his right hand and a clipboard with his left. The background is filled with blurred wooden pallets and metal shelving, suggesting a busy industrial environment.

Early IWH work on low-back pain encouraged a shift away from passive therapies such as bed rest towards advice to stay active

“MANY CANADIAN EMPLOYERS HAVE LED THE WORLD in adopting policies to accommodate valued employees with disabilities. We can all be proud of this accomplishment, and the Institute’s research has helped make this achievement possible.”

Wolfgang Zimmermann

Executive Director, National Institute of Disability Management and Research

led the development of the Opioid Manager, a tool designed to help doctors when prescribing opioids. The tool is a user-friendly, double-sided, colour-coded chart that condenses the key elements of the 200-page guideline, and is also available as an app.

IWH also participated in the WSIB’s Drug Advisory Committee (DAC), which began meeting in 2008. According to the WSIB, between 2001 and 2009, narcotic prescription costs had increased by close to 700 per cent, from \$4.4 million to \$35 million. Drawing on evidence provided by the DAC, the WSIB implemented a new narcotics strategy that took effect in February 2010. Under the strategy, the WSIB initially only allows prescriptions for short-acting narcotics for a maximum of 12 weeks following a new injury or recurrence. In its report *2012-2016 Strategic Plan: Measuring Results: Q1 2013*, which focused on return-to-work and recovery outcomes, the WSIB noted that use of long-acting narcotics for new claims within 12 weeks of injury had declined by 87.4 per cent compared to 2009, and annual narcotics spending decreased by \$6.1 million (17.3 per cent).

Not only has IWH research contributed directly to improvements in clinical practice in the treatment of work injuries, it has also contributed indirectly, but importantly, through the development of techniques to better measure disability. The most influential of these is the Disabilities of the Arm, Shoulder and Hand (DASH) Outcome Measure™, which is marking its 20th anniversary in 2016.

The DASH Outcome Measure is a 30-item, self-report questionnaire designed to measure physical function and symptoms in patients with any of several musculoskeletal disorders of the upper limb. The measure looks at the ease or difficulty of doing a variety of everyday activities such as opening a jar, cutting food with a knife or pulling on a sweater over the head.

In 1996, when the DASH was developed by an IWH team in conjunction with the American Association of Orthopedic Surgeons, no measure had previously existed to assess the disability and function of the arm, shoulder and hand as a whole. Today, this outcome measure is available in 50 languages and dialects, and has been the subject of almost 2,000 journal articles. It is used around the world, in clinical, research and commercial applications. An alternative format of the measure—a shorter, 11-item version called the *QuickDASH*—was released in 2005. And in July 2013, an iPad app version of the DASH Outcome Measure was released.

Because of the tool’s proven validity and reliability, it is favoured when health-care practitioners are called on to track patient outcomes. For example, in Ontario, the WSIB operates a “Program of Care” for workers with shoulder injuries. At two points in the program—initial assessment and discharge—the program requires clinicians to complete, record and submit *QuickDASH* results to the WSIB. The WSIB uses these results to measure the success of the Shoulder Program of Care and of the health professionals delivering the program.

IMPROVING ACCOMMODATION AND RETURN-TO-WORK PRACTICES

Over the past 25 years, Canadian employers have made outstanding progress in recognizing their duty to accommodate persons with disabilities, guided by very strong human rights protections. This progress includes very much improved practices in enabling and supporting return to work among employees who have experienced a work-related injury or illness.

The work of the Institute has helped document this progress, and its research guidance identifying effective practices for the prevention of work disability has been widely adopted in Canada and around the world. Indeed, it could be argued that, to date, one of the areas in which

IWH's research has been most influential is return to work—on both the policies developed by workers' compensation boards and the practices adopted by workplaces.

Achieving optimal return-to-work outcomes—outcomes that support the functional recovery of injured workers and minimize workplace and societal costs—is a complex challenge. RTW outcomes, including the sustainability and quality of return-to-work experiences, are shaped by case law establishing the employer's duty to accommodate, workplace organizational factors, health-care delivery practices, insurance delivery and compensation policies, and the needs and expectations of injured workers.

One of the Institute's highest impact studies was a 2004 systematic review on workplace-based RTW interventions. The review, currently being updated by IWH, included both quantitative and qualitative studies. Drawing on the findings of the systematic review and other research that was current in the years after the review, the Institute developed the *Seven "Principles" for Successful Return to Work*, originally published in 2007.

In brief, the seven principles involve: a workplace commitment to safety; an offer of modified work to the employee; an RTW plan that supports the worker without disadvantaging others; supervisor training and inclusion in RTW; early and considerate contact with the worker; having someone within the workplace who is responsible for RTW planning; and an information exchange between employers and health-care providers as needed.

The *Seven Principles* document is the most-downloaded guide produced by IWH. Both the International Labour Organization and Canada's National Institute of Disability Management and Research have authored codes of practice that reflect the principles articulated by IWH research.

Another IWH product that has been useful to the practice of disability management is *Red Flags/Green Lights: A Guide to Identifying and Solving Return-to-Work Problems*, which emerged from an IWH qualitative research study on complex workers' compensation cases in Ontario. The guide identifies barriers ("red flags") and potential solutions ("green lights") in four contexts in which RTW problems often arise: workplace factors, vocational rehabilitation, worker health status and administration of workers' compensation claim benefits.

Since its publication in May 2009, *Red Flags/Green Lights* has consistently been one of the tools most downloaded from the IWH website. The guide was also used as part of the training that WSIB case managers and RTW specialists underwent in 2009 and 2010 as the WSIB implemented a new service delivery model. That model called on case managers to assess very early in the duration of a claim the degree of WSIB involvement needed to ensure an injured worker's return to work.

Research by IWH has also helped identify factors that influence/predict RTW outcomes among injured workers. Work in the 1990s pointed to key prognostic factors, such as pain and function in the period just after the injury and worker expectations about recovery. Questions related to such factors became embedded in clinical guides and case management practices, such as the WSIB programs of care.


IMPROVING COMPENSATION AND BENEFITS PROGRAMS

From its inception, research on how to improve workers' compensation programs has been a key part of the work of IWH. Indeed, it was originally *the* key part.

Among the important research projects initiated in the first five-year period of the Institute was a large study called the Early Claimant Cohort Study. Initiated in

“For more than two decades, the Institute’s imaginative and impartial research has made important contributions to our efforts to reduce the burden of work-related injury, illness and disability among Ontario’s workers.”

Elizabeth Witmer
Chair, Workplace Safety and Insurance Board



IWH research guidance
on effective return to work
has influenced both policy and
workplace practices

“IN TRANSFORMING SERVICE DELIVERY TOWARDS RECOVERY, return to work and client satisfaction outcomes, WSIB used research to create evidence-based practice in a host of areas, including initial case assessment or ‘triage’, recovery and RTW planning, the creation of new roles and case management practices to coordinate workplace-based RTW interventions, and a complete redesign of the former Labour Market Re-entry program. IWH was a primary source of evidence and advice about what works. The results are impressive.”

Judy Geary

[former] Vice-President, Program Development,
Workplace Safety and Insurance Board

1993, its primary objective was to evaluate the effectiveness of the community clinic program set up by the Ontario Workers' Compensation Board (WCB, now the WSIB).

The study findings were clear. Although the average cost of therapy per claimant in community clinics was approximately \$1,000 higher than for injured workers not attending the program, injured workers referred to care in community clinic settings did not have a better prognosis over the recovery period than workers receiving care in other settings. In addition, injured workers in care in community clinics were, on average, likely to be absent from work for a week longer.

When these findings were reported to the WCB in 1995, the Board reduced the scale of its community clinic program. From 1990 to 1995, approximately 16 per cent of injured workers with soft-tissue injuries were referred to community clinics. After the program was scaled back, approximately six per cent of injured workers were referred to community clinics.

Based on a separate analysis of administrative records of claimants, health-care payments to providers and wage-loss compensation, the Institute estimated that scaling back the community clinic program over the four-year period 1996 to 1999 reduced expenditures for health-care services by approximately \$18 million and for wage-loss expenditures by approximately \$6 million.

Another important contribution to the WSIB's work was an analysis of long-duration claims by an IWH team working in collaboration with a team at the WSIB. According to this research, the rise of long-duration claims after 1999 was attributable to legislative changes (Bill 99) and concurrent changes in the organization of case management practices within the WSIB, and not to changes in the workforce or severity of injuries.

In part responding to the findings of this work, the WSIB introduced a New Service Delivery Model (NSDM) in

2009. The NSDM brought a new case management focus to the delivery of services to injured workers and their employers, with an emphasis on improving RTW outcomes. The new case management service incorporated procedures based on the best evidence available. The 2009 Annual Report of the Office of the Auditor General of Ontario also noted the importance of IWH research on long-duration benefit claims identifying the need for changes in the WSIB's service delivery model.

In its report, *2012-2016 Strategic Plan: Measuring Results: Q1 2013*, the WSIB indicated that the NSDM had a marked impact on improving RTW outcomes. By early 2013, the percentage of decisions about a claim being accepted or not within a two-week period jumped from 65 to 90 per cent. As well, the percentage of workers still on benefits after 12 months dropped from 8.9 to 3.9 per cent.

A comparison of annual benefit expenditures between 2009 and 2012 documented a reduction in loss-of-earnings benefits of \$181 million. The WSIB attributed these outcomes to the NSDM; a new work reintegration (vocational rehabilitation) program, which was heavily influenced by IWH research; and improved health-care services, including the narcotics strategy, in the development of which IWH played an important part. The WSIB also noted that the reduction in annual benefit expenditures was in part attributed to a decline in the number of accepted lost-time claims.

IWH research on workers' compensation issues included a valuable partnership with representatives of the injured worker community, through the Research Action Alliance for the Consequences of Work Injury (RAACWI). RAACWI was a unique partnership between injured workers and researchers who came together to explore joint research projects. Among other accomplishments, RAACWI was instrumental in helping the WSIB recognize and address the issue of stigmatization of injured workers.

MAKING A DIFFERENCE TO THE FIELD OF WORK AND HEALTH RESEARCH

The field of work injury and disability prevention research is stronger today, thanks to the Institute's contribution of innovative research methods and dedicated researchers. Both have increased the capacity of academic institutions and research organizations to advance this growing and important research area.

CONTRIBUTING EXPERTISE TO RESEARCH METHODS

Behind every IWH finding is a team of researchers using their expertise to ensure the finding is reliable, valid and trustworthy. IWH research has been distinctive in many ways.

One of these is IWH's emphasis on **multidisciplinary** research. From its inception, the Institute focused on building collaborative teams of researchers from different disciplines to bridge the gap that often existed between clinical/health-care and population-based researchers. As a result, core research disciplines at the Institute include not only epidemiology and statistics, but also clinical disciplines, economics, psychology and sociology. IWH expertise also cuts across both quantitative and qualitative research—the former using numbers-based research to point to problems and solutions, the latter using interview-based research to help explain them.

IWH has developed and contributed specialized expertise in **biostatistical** methods. Team members are experts in modelling change over time, in survey design, and in analyzing data where the relationships among the variables of interest are complex. This has resulted in important developments in the work and health field; for example, in the development of alternative techniques for understanding the three-phase hypothesis for the course of back pain (acute, subacute and chronic), and to the advancement of our understanding of the classification of upper extremity disorders.

IWH's biostatistical expertise has been applied in particular to the analysis of routinely collected **administrative data**, such as that available from workers' compensation boards, hospital emergency departments and more. Indeed, because of its privileged access to workers' compensation data—something no other institute in the province and very few in Canada had when the Institute started out—IWH developed a unique niche. It devoted significant time and skill to understand the intricacies of these databases and to develop this information for use to answer complex research questions. This same expertise has also been applied to Statistics Canada survey data.

Data linkage is another area in which IWH got an early start and, over the years, has developed substantial expertise. For example, by linking workers' compensation data and Statistics Canada data on the income of taxpayers, IWH has made significant contributions to our understanding of the adequacy of workers' compensation benefits.

IWH has made original contributions to the **measurement of functional limitations**. As a result, it gained an international reputation for its strength in psychometric methods and the conception of health, function and disability. This has led to IWH being invited to be part of consensus statements on the measurement of functional status in disorders of the lower back and upper extremities.

IWH is a leader in **systematic review methods** in the work and health field. These systematic reviews answer specific OHS questions by reviewing thousands of articles on the given topic, determining those of sufficient quality to be considered meaningful, and synthesizing their findings. The result is a message that can be used with confidence by those responsible for workers' health and safety. A key feature of the IWH approach is consulting stakeholders on the selection of topics for reviews and involving them in multiple stages of the research process,



Behind every IWH finding is a team of researchers using their expertise to ensure the finding is reliable, valid and trustworthy

such as helping with the strategy for searching the literature for relevant articles, and with framing of key messages in ways that will be useful for policy-makers and OHS practitioners.

IWH began conducting systematic reviews in 1994, when it was commissioned to answer specific questions posed by the WSIB. The first was on the case management of low-back pain and the second on chronic pain. IWH strengthened its commitment to systematic reviews when it agreed the following year to host the Cochrane Back Review Group (now called Cochrane Back and Neck). This Cochrane group, one of more than 50 in the now international Cochrane Collaboration, coordinates reviews on the prevention and treatment of back and neck pain.

In the early 2000s, IWH and the WSIB entered into a multi-year funding agreement to establish a formal systematic review program on the effectiveness of interventions to prevent workplace injury, illness or disability. More than a dozen reviews were generated on various OHS and RTW interventions and practices.

SUPPORTING NEW RESEARCHERS IN WORK AND HEALTH

Since its early days, IWH has made it a point to develop and financially support graduate and post-doctoral students. One of the key ways IWH supports budding researchers is through its fellowships. Since 1999, the Institute has offered a two-year post-doctoral fellowship in work and health. This award, the Mustard Fellowship in Work Environment and Health, is named in honour of Dr. Fraser Mustard, chair of the Institute's founding Board of Directors. In appreciation of Dr. S. Leonard Syme's contributions to IWH as chair of its Scientific Advisory Committee between 1995 and 2002, IWH



also offers a fellowship program in his name for young researchers at the master's or doctoral level intending to study work and health.

Through these fellowships, IWH has supported two master's, 22 doctoral and eight post-doctoral students in the 25 years since it opened its doors. Even more than the salary support that IWH offers, students have benefited from ongoing participation in IWH grants, which has given them hands-on experience in research, skills development in diverse methods, networking opportunities with various partners and stakeholders, and exposure to knowledge transfer and dissemination. Most of these students have gone on to establish successful research careers, many with a research focus in the primary or secondary prevention of work-related injury and disability.

IWH further contributes to the development of research capacity in work and health through the teaching work of its scientists. All IWH scientists are affiliated with one or more Ontario universities, and many teach courses on research methods and supervise graduate students. IWH also runs regular workshops on systematic reviews and measurement methods, which attract students from a range of disciplines in the social sciences.

“THE [MUSTARD] FELLOWSHIP OPPORTUNITY at the Institute was instrumental in the development and evolution of the Partnership for Work, Health and Safety at the University of British Columbia. The Partnership has spawned a number of collaborative projects with IWH investigators including comparative compensation/work-health research across provinces/jurisdictions.”

Dr. Mieke Koehoorn

Head, Occupational and Environmental Health Division, School of Population and Public Health, University of British Columbia, CIHR Chair, Gender Work and Health, IWH Mustard Fellow, 1998-2000

MAKING A DIFFERENCE THROUGH KNOWLEDGE TRANSLATION AND EXCHANGE

The diffusion of research results to stakeholders—including policy-makers, employers, workers, injury and disability prevention professionals, health and safety associations and clinicians—has been a key priority of the Institute since it opened its doors. As IWH wrote in its first five-year review report, “Research for its own sake is not enough. Our research findings must lead to practical information and solutions to the problems which are within our mandate to address.”

As early as 1995, the Institute appointed a full-time director of research operations and diffusion, in recognition of the need for dissemination and application of the Institute’s research outputs. Significant portions of senior staff time were committed to interactions with, and presentations to, a variety of government, employer, labour, OHS and health-care organizations to ensure the continued vitality and support for the Institute—a practice that continues to this day.

In 1998, IWH established research transfer as a core part of its business alongside research. An evidence-based research transfer strategy was developed and put into place early in 2000. In adopting a formal research transfer program (now run through the Institute’s Knowledge Transfer and Exchange Department), the Institute was an early innovator among research organizations in Canada. Later, IWH again led the way by being an early adopter of an integrated approach to KTE, in which stakeholders are involved in the research process from the outset.

At IWH, KTE is defined as a process of exchange between researchers and stakeholders/knowledge-users designed to make relevant research information available and accessible for use in practice, planning and policy-making. It incorporates both communications functions (e.g. website, newsletters, media releases, social media) aimed at reaching a wide audience, and stakeholder engagement (e.g. networks, outreach, one-on-one meetings, group

presentations) aimed at building relationships with potential research users and integrating stakeholders in multiple stages of the research process.

The KTE team at the Institute has established networks of stakeholders to help IWH stay in touch with emerging issues in different stakeholder communities, as well as to help disseminate the results of IWH research. All the networks share a common purpose: to promote evidence-informed policy and practice in the prevention of work injury and disability.

Turning research into practical, evidence-based tools is an important part of KTE at IWH. To date, the Institute has developed about 20 tools, and they have proved to be very popular. The range of tools is diverse, from *eOfficeErgo*, an online ergonomics training program for office workers, to *Prevention is the Best Medicine*, a kit for teaching newcomers to Ontario about their health and safety rights and responsibilities, to *Seven “Principles” for Successful Return to Work* on effective practices for helping workers return to work.

Another goal of the KTE department is to help external audiences understand research. In addition to publishing lay summaries and promoting IWH plenaries on emerging research, KTE staff also produce a column called “What Researchers Mean By...” This column, which receives more views than any other offering on the IWH website, explains what researchers do and the language they use when reporting their findings.

A MESSAGE FROM THE CHAIR AND THE PRESIDENT

2015 marked the 25th anniversary of the establishment of the Institute. Since its beginnings in 1990, the Institute for Work & Health has become a world leader in research on preventing work injury and illness and improving the health and recovery of injured workers.



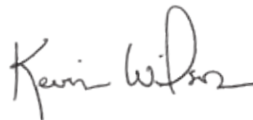
The Institute's work provides impartial, evidence-based guidance to policy-makers in provincial and federal governments and agencies, health and safety associations, workplace parties, occupational health and safety professionals, disability management professionals and clinicians. Ongoing relationships with key stakeholders help us to identify research priorities, frame research questions and communicate findings in ways that are useful for policy and practice. We are grateful to our stakeholders for their commitment to worker health and safety and for their engagement in our work.

We also thank the organizations whose funding has made our work possible: the Ontario Ministry of Labour, Ontario's Workplace Safety and Insurance Board, and numerous granting agencies, including the Canadian Institutes of Health Research, the Social Sciences and Humanities Research Council of Canada, the Workers Compensation Board of Manitoba and WorkSafeBC.

As we look back proudly on the contributions of IWH to improving worker health and safety, we also look forward to the work ahead. IWH is actively engaged with its stakeholders on many emerging or growing issues, including: preventing work injury or work disability among older workers; developing leading indicators of occupational health and safety outcomes; identifying

ways to help employers meet the needs of workers with chronic or episodic conditions, including mental health conditions; improving the quality and consistency of current disability management practices; measuring the vulnerability of individual workers to the risk of work injury or illness; and identifying ways to improve the prevention of workplace violence.

Finally, we offer our appreciation to IWH staff, past and present, whose skill, knowledge and dedication to our mission have made it possible for IWH to make a difference.



Kevin Wilson
Chair, Board of Directors
Institute for Work & Health



Dr. Cameron Mustard
President and Senior Scientist
Institute for Work & Health

Leader

THE ORIGINS OF IWH

In 1990, the Workers' Compensation Board of Ontario (now called the Workplace Safety and Insurance Board) introduced a new medical rehabilitation strategy. The strategy was built around a network of 100 community clinics and regional evaluation centres designed to provide workers with soft-tissue injuries rapid access to needed assessments and treatments.

Dr. Robert Elgie, then chair of Ontario's WCB, and Dr. Alan Wolfson, then its vice-chair and president, recognized the need for an independent, not-for-profit organization to do high quality research on the effectiveness of the Board's medical rehabilitation services. The Ontario Workers' Compensation Institute was born.

The Institute's initial mandate was to conduct health-care research into the management of workers with injury and disease, contribute new knowledge to the training of medical rehabilitation professionals, and monitor the quality of the provincial WCB's community-based rehabilitation services. The overall goal was to return injured workers to full functioning as soon as possible. Injury prevention was not a big part of the mix.

However, that changed when Dr. Fraser Mustard, the chair of the Institute's inaugural Board of Directors, ensured the first master agreement between the Institute and the WCB included a focus on "upstream" research that would look at factors that contribute to work injury and illness at both the workplace and societal level. The organization was renamed the Institute for Work & Health in 1994 to reflect this broadened mandate.

LAYING THE GROUNDWORK

The Institute's growth during its first few years was incremental and focused on laying the groundwork—recruiting senior scientists from related academic institutions, staffing administrative positions and building its research program. By the mid-1990s, however, the Institute had blossomed, and initial research results were forthcoming.

Our

From the outset, the Institute took a broader view of its mandate than most occupational health research institutions. Its research agenda included not simply the causes, treatment and prevention of conditions caused by work exposures, but also the fundamental determinants of health as manifested in workforces; that is, the broad social, cultural, economic and political forces that influence the nature of work and the way it is done. This work suggested that true primary prevention of the major causes of occupational disability necessarily involves high-level policy interventions.

The Institute also took a broader view with respect to disseminating its research findings to those who could use them to make a difference in protecting the health of workers. In 1998, research transfer was established as a core business of the Institute alongside research, and an evidence-based strategy on research transfer—now called knowledge transfer and exchange—was developed and implemented early in 2000.

BUILDING TRUST

Since day one, the Institute worked hard to build trusting relationships with all stakeholders in injury prevention, return to work and workers' compensation in Ontario. Its Board of Directors included business, labour, policy and research leaders from Ontario and beyond. Today, the make-up of the Institute's Board remains the same.

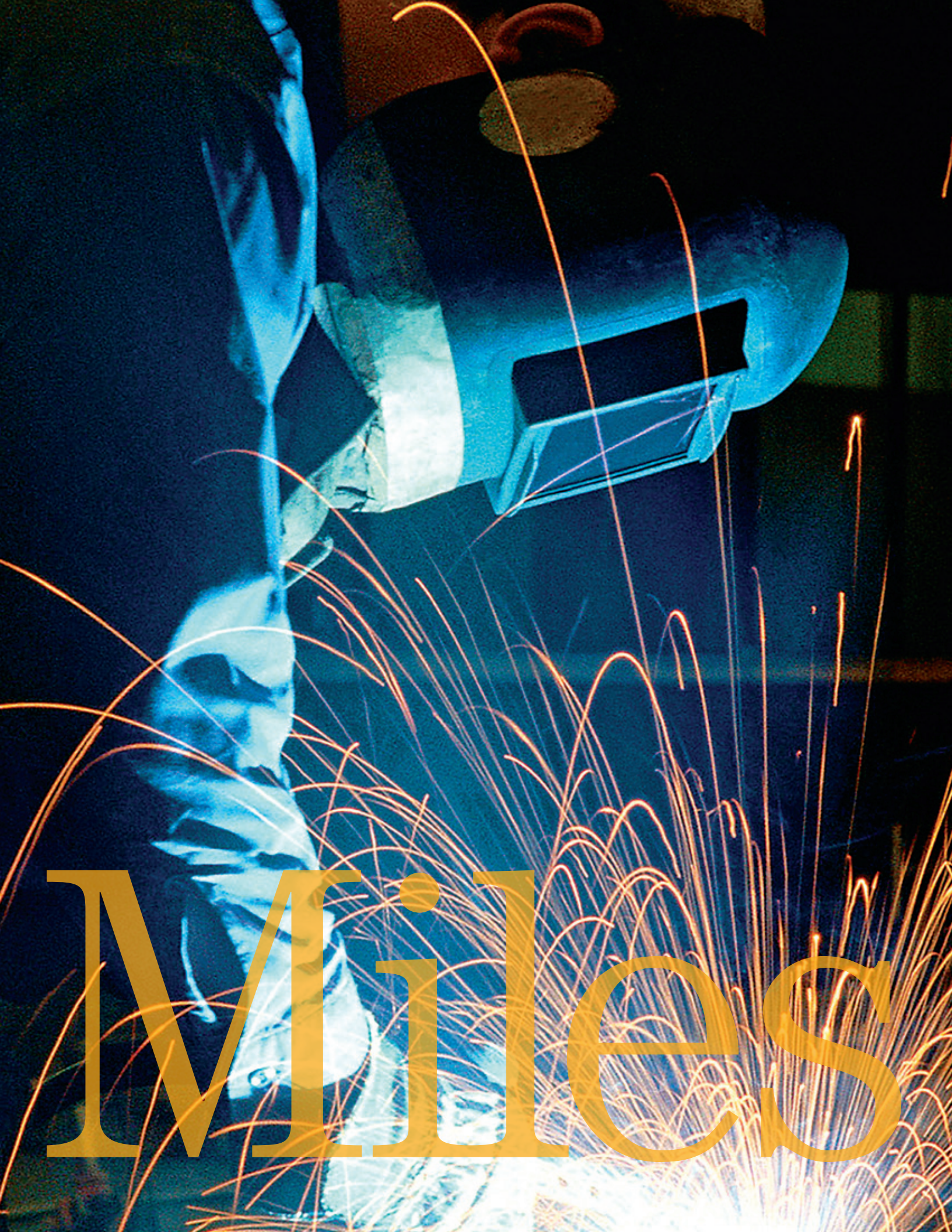
The Institute has also received guidance from a Scientific Advisory Committee throughout most of its 25 years. This committee is made up of leaders in work and health research from North America and Europe. Members meet annually to review the quality and direction of the Institute's research, reporting its findings to the Institute's Board. IWH has also taken advantage of the advice of a Knowledge Transfer and Exchange Advisory Committee, which continues to meet yearly to provide feedback and suggestions to the Institute's KTE team.



The Institute has benefited from stable core funding, which provides a solid base from which to seek further research grant and other funding. The core funder was Ontario's Workplace Safety and Insurance Board and its predecessors for the first 22 years and then, as of 2013, the Province of Ontario through the Ministry of Labour. As a result, IWH's connection to Ontario is fundamental to its identity. Fundamental, but not exclusive. IWH focuses its research on the Ontario workforce and on Ontario workplace issues while collaborating with researchers and research organizations elsewhere in Canada and internationally.

From a fledgling organization with six staff and a loosely defined mandate in 1990 to a mature and unique interdisciplinary research and knowledge transfer organization with over 60 employees 25 years later, the Institute for Work & Health is now recognized provincially, nationally and internationally for its contribution to the fields of occupational health, work injury and disability prevention, and work-related population health.

Origins



Miles

1990

The Ontario Workers' Compensation Institute (OCWI) is created through a master agreement with the Workers' Compensation Board.

Dr. Fraser Mustard is recruited as the first chair of the Institute's Board of Directors and tasked with the role of steering and developing this new research organization.

Dr. Hugh Smythe, an internationally renowned rheumatologist, is brought on board as the Institute's first president.

1991

Dr. John Frank, a member of the Population Health program at the Canadian Institute for Advanced Research, becomes the Institute's first research director. He is joined by Dr. Claire Bombardier from the University of Toronto and Dr. Harry Shannon from McMaster University to become the first three senior scientists at the Institute.

Emma Irvin joins the Institute to open up its library. She gains in-depth knowledge of IWH operations in the ensuing years, resulting in her appointment as director of research operations in 2008, where she remains today.

1992

Dr. Sheilah Hogg-Johnson from the University of Toronto joins the Institute as its senior biostatistician. For the next 20-plus years, she provides expertise in statistical methodology, eventually becoming an associate scientific director at the Institute, where she remains today.

The Research Advisory Committee meets for the first time to assess the independence, breadth and quality of the Institute's research. Now named the Scientific Advisory Committee, this ongoing committee of distinguished international research experts continues to provide important feedback on IWH's program of research.

1993

Dr. Terrence Sullivan becomes the second president of the Institute, bringing with him a strong background in public policy and health policy.

1994

The OWCI is renamed the Institute for Work & Health to reflect the widening scope of its research.

1995

After being seconded from Ontario's Workers' Compensation Board in 1992, Sandra Sinclair takes on a full-time position at the Institute as director of research operations and diffusion.

The Institute enters into a formal affiliation agreement with the University of Toronto. Similar agreements are later entered into with the University of Waterloo (1996), McMaster University (1997) and York University (2002).

IWH publishes the first issue of its flagship newsletter *At Work*, and joins the Internet age with the launch of www.iwh.on.ca.

1996

The Institute sponsors the creation of the Cochrane Back Review Group. The founding co-editors of CBRG are Dr. Claire Bombardier of IWH and Dr. Alf Nachemson from Sweden.

The DASH Outcome Measure is developed and launched to help bring consistency to the measurement of pain and functional limitations from upper extremity MSDs.

The report of the first five-year (1991-1996) external review panel assessing IWH's work remarks that "the interdisciplinary research approach to workers' health and, particularly, the emphasis on the determinants of workers' health" are "a distinctive trait" of the Institute, contributing to the "practical applications of IWH research in workplace policy development."

tones

1997

Anne Larson joins IWH as vice-president responsible for application of the Institute's research, related business development and administration.

Mary Cicinelli joins the executive team as manager of human resources, budgeting and office management, and remains with the Institute to this day as director of human resources and corporate services.

1998

Under the direction of Anne Larson and Dr. John Lavis, IWH's associate research director, research transfer is established as a core business of the Institute, alongside research. The predecessor of today's Knowledge Transfer and Exchange (KTE) Department is born.

1999

Dr. Fraser Mustard steps down as the inaugural chair of the Institute and a Mustard Fellowship in Work Environment and Health, a two-year post-doctoral fellowship, is established in his honour.

IWH co-sponsors an international meeting in Toronto with the Canadian Institute for Advanced Research (CIFAR) Population Health Program on biological mechanisms linking social environments, life-course experiences and health.

Along with the WSIB, IWH co-hosts the Fourth International Congress on Medical-Legal Aspects of Work Injuries, bringing together 600 delegates from over 20 countries to discuss and compare approaches to prevention, rehabilitation and compensation.

2000

IWH co-hosts the first North American Summit on Health and Productivity in Toronto, with the U.S. Institute of Health & Productivity Management.

Jane Gibson joins the Institute as the director of research transfer to lead the roll-out of IWH's evidence-based KTE strategy.

2001

The Toronto-based Institute moves from its first home at 250 Bloor St. East to its new home at 481 University, where it remains today.

IWH helps found the Canadian Association for Research on Work and Health (CARWH) to provide a national voice for researchers interested in work and health.

IWH sets up its first educationally influential (EI) network—for physiotherapists. EI networks for physicians, chiropractors, occupational therapists and ergonomists soon follow.

2002

After three years in the role of scientific director, Dr. Cam Mustard becomes president of the Institute for Work & Health, and remains in the position today.

S. Leonard Syme Research Training Fellowships for new researchers at the master's or doctoral level are created to recognize the contributions of the long-time SAC chair.

The report of the second five-year (1997-2001) external review panel assessing IWH's work finds that IWH "has evolved into a mature and impressive research institute with an international reputation," producing and publishing "research of the highest quality" and creating a multidisciplinary environment that is "rare and extremely attractive to senior scientists, emerging researchers and students alike."

2003

Dr. Tony Culyer, a well-known health economist, assumes the role of chief scientist at IWH.

The Knowledge Transfer and Exchange Advisory Committee meets for the first time. It is tasked with providing advice and feedback to the Institute's KTE team on the quality, impact and approaches of its stakeholder engagement and communications programs.

IWH hosts the first Alf Nachemson Lecture to honour the orthopaedic surgeon's significant contributions to the use of research evidence in clinical decision-making.

Milestones

2005

The Institute sets up a formal systematic review program, capitalizing on its original research and expertise into the methods of conducting systematic reviews.

2006

The Research Action Alliance on the Consequences of Work Injury brings together academics and injured workers in a five-year research project to scientifically document the effects of work injury.

2007

Dr. Ben Amick, from the University of Texas School of Public Health, joins the Institute as its scientific director.

The report of the third five-year (1992-2006) external review panel assessing IWH's work notes "the remarkable progress over the past five years growing the prevention emphasis in the Institute's work, strengthening the knowledge transfer activity across the full range of research projects, and expanding collaborations with a broad range of stakeholders, in particular Ontario's health and safety associations."

2008

The Institute is branded with a new visual identity, including a new logo, an updated website and a redesigned *At Work* newsletter.

2010

IWH hosts the sixth CARWH conference, bringing together about 220 academics, policy-makers, employers, union representatives and injured worker advocates with a shared interest in the latest research on work and health.

2011

A one-time assistant deputy minister in the Ontario Ministry of Labour, Dr. Ron Saunders becomes the Institute's director of knowledge transfer and exchange on top of the senior scientist position he assumed when he joined IWH in 2008.

2012

The Institute hosts an international Financial Incentive Symposium on the challenges of workplace injury prevention through financial incentives, including experience rating.

Dr. Monique Gignac, co-scientific director of the Canadian Arthritis Network, joins IWH's executive team as associate scientific director.

The report of the fourth five-year (2007-2011) external review, conducted this time by the SAC, says IWH plays "a unique and vital role in research and education" and that "there are no comparable institutions in North America."

2013

The Province of Ontario becomes IWH's core funder, taking over from the WSIB, which had supported the Institute up to this time.

2014

Institute scientists formally launch the Centre for Research on Work Disability Policy, a seven-year research initiative funded by the Social Sciences and Humanities Research Council to look at the future of work disability policy in Canada.

tones

THE PEOPLE MAKING A DIFFERENCE TODAY

In 2015, the Institute for Work & Health employed 57 staff (47 full-time and 10 part-time). Some have been with the Institute for the majority of its days—20 years in a few cases. Others are new to the organization. All play an important part in the multidisciplinary and collaborative culture that characterizes the Institute.

THE PEOPLE WHO MADE A DIFFERENCE

Over its 25 years, the Institute for Work & Health has employed close to 500 people. These not only include scientists and other research staff, but also knowledge transfer/communications, library, systems, operations, human resources/finance and administrative staff.

The following includes all those on IWH's staff lists culled from past documents (and the Institute sincerely apologizes to those who are inadvertently missing from the list).

Visiting scientists, summer students and others who were not on the payroll may not be included in this list. An asterisk (*) indicates the employee was with the Institute for more than five years, and an oblong (∞) indicates the employee was a member of the executive team at some point in his or her tenure with the Institute.

SCIENTISTS

Amick, Ben*∞
Ammendolia, Carlo
Beaton, Dorcas*
Bigelow, Philip*
Bombardier, Claire*
Bornstein, Stephen∞
Breslin, Curtis*
Busse, Jason
Cole, Donald*∞
Côté, Pierre*
Culyer, Tony*∞
Franche, Renée-Louise*
Frank, John*∞
Furlan, Andrea*
Gignac, Monique ∞
Gnam, William
Guzman, Jaime*
Hepburn, Gail
Hogg-Johnson, Sheilah*∞
Hyatt, Doug
Ibrahim, Selahadin*
Kerr, Mickey*
KoeHoorn, Mieke
Kosny, Agnieszka*
Kristman, Vicki*
Landsman, Victoria
Lavis, John ∞
MacEachen, Ellen*

McLeod, Chris*
Mondloch, Michael*
Muntaner, Carlos
Mustard, Cam*∞
Payne, Jennifer
Polanyi, Michael
Robson, Lynda*
Scott-Marshall, Heather*
Shannon, Harry*
Sinclair, Sandra*∞
Smith, Peter*
Stansfeld, Stephen
Steenstra, Ivan*
Sullivan, Terry*∞
Tarasuk, Valerie
Tolusso, David
Tomba, Emile*
Van Eerd, Dwayne*
Zohar, Dov

OTHER RESEARCH/ SCIENTIFIC STAFF

Abdolell, Mohammed
Abramovitz, Mike
Adihetty, Chamila
Alexander, Charles
Ali-Khan, Omar
Allen, Danielle
Allingham, Katherine



TOP L TO R
Cameron Mustard
Jonathan Fan
Christina Kalcevich
Victoria Landsman
Shireen Harbin
Andrea Furlan
Nancy Carnide
Hyunmi Lee

BOTTOM L TO R
Marni Lifshen
Morgan Lay
Peter Smith
Agnieszka Kosny
Quenby Mahood
Cathy Sir
Dylan Maccarone
Mary Cicinelli
Dorcas Beaton
Charmaine Heath



Ambus, Ingrid
An, Kelly
Antal, Joan*
Bachoo, Natasha
Bambury, Alison
Banina, Melanie
Barlow, Amy
Bertrand, Kim
Bhattacharyya, Sudipa*
Bielecky, Amber*
Bienefeld, Monica
Bogaert, Laura
Bowring, Julie
Brooker, Ann-Sylvia*
Bryan, Paul
Buchbinder, Rachelle
Buettgen, Alexis
Burr, Herman
Cai, Tao
Cale, Virginia
Campolieti, Michele
Carlton, Nicolette
Carnide, Nancy*
Carrasco, Christine
Cawley, Caroline
Cespedes, Hans
Cesta, Angela
Chambers, Andrea
Chambers, Lori

Chan, Adrian
Chan, Sally
Chan, Stella
Chan, Teresa
Chen, Cynthia*
Chesser, Stephanie
Chow, Karen
Chung, Jinjoo
Cicinelli, Aislinn
Clarke, Judy*
Cohen, Joanna
Colatruglio, Sarah
Collins, Michael
Constante, Alicia
Cullen, Kim*
Danak, Shivang
David, David
Daviimar, Arold
Day, Doreen
De Bruin, Linda
D'Elia, Teresa
DeMaio, Suzanne
Desouza, Charmaine
Dickie, Caroline
Di Leo, Michael
Dobbins, Maureen
Dolinschi, Roman*
Dufour, Joelle
Duraz, Lubna

Dusky, Sarah
Edney, Dara
Elliot-Gibson, Victoria
Elramly, Mai
Ervine, Craig
Escorpizo, Reuben
Esmail, Rosmin
Etches, Jacob*
Ewasko, Janine
Facey, Marcia
Fan, Jonathan
Fancott, Carol
Fang, Miao
Farahati, Farah
Farrant, Mark
Farrell, Janet
Fenech, Catherine
Ferraz, Marcos
Ferrier, Megan
Ferrier, Sue*
Ferron, Era Mae
Fortune, Melanie
Foty, Richard
Francisco, Gilbert
Fry, Jacqueline
Galipeau, Mary
Galvao, Catherine
Garritty, Chantelle
Gentles, Brenda

Goindi, Reena
Gildiner, Alina
Gray, Garry
Greco, Lori
Guillemin, Francis
Haidar, Hassan
Hamer, Julie
Harbin, Shireen
Harniman, Elaine
Hawkins, Naoko
Hawn, Christian
Hayden, Jill
Hill, Spencer
Hohenadel, Joanne
Howse, Dana
Hudak, Pam
Hughes, Ray
Hussain, Nizam
Ignatenko, Tamara
Imam, Sabrina
Jafri, Gul Joya
Janz, Gwen
Jetha, Arif
Johnson, Alex
Johnson, Sam
Johnson, Scott
Jones, Debbie
Kajaks, Tara
Kalcevich, Christina*

Kalemba, Valery
Kaptein, Simone
Karim, Preetom
Karmakar, Sunita
Kells, Robin
Kenaszchuck, Chris
Kennedy-Yee, Carol*
Kenyon, Jeannine
Kessanis, Alex
Khambalia, Amina
Kim, Jaemin
Kita, Mary
Knight, Julia
Kolpack, Pamela
Krepostman, Suzan
Kyle, Natasha
Lambert, Liz
Lander, Nat
Lanthier, Stephanie
Latour-Villamil, Désiree
Lay, Morgan
Lee, David
Lee, Hyunmi*
Leung, Alice
Lever, Bev
Liao, Qing*
Lifshen, Marni*
Lo, Jonathan
Lofranco, Charlotte

TOP L TO R
 Desirée Latour-Villamil
 Michael Swift
 Kristina Buccat
 Jan Dvorak
 Ulrik Gensby
 Albana Çanga
 Selahadin Ibrahim
 Sara Macdonald
 Sabrina Tonima



BOTTOM L TO R
 Lynda Robson
 Kathy Padkapayeva
 Curtis Breslin
 Colette Severin
 Cindy Moser
 Paolo Maselli
 Lyudmila Mansurova
 Grant Yao
 Jocelyn Dollack
 Sheila Hogg-Johnson
 Chris McLeod



Lohfeld, Lynne
 Louche, Magali
 MacDonald, Heather
 MacNeil, Scott
 Maetzel, Andreas
 Magalhaes, Lillian
 Makela, Matii
 Maltin, Eylse
 Mangione, Daniella
 Manno, Michael
 Mansfield, Liz
 Marchese, Nadia
 Marin, Tesera
 Marx, Robert
 Massey, Christine
 Maton, Robert
 Mazumder, Anjali
 McAlpine, Jessica
 McCarney, Jane
 McConnell, Sara
 McIntosh, Greg
 McLaughlin, Janet
 Mersereau, Matt
 Messina, Sherry
 Missiha, Nancy
 Moore, Ian
 Munhill, Claire*
 Murphy, Louise
 Murray, Eleanor

Mustard, Rose
 Nasir, Kay
 Natalie, Brenda
 Nowlan, Marie-Andree
 Oad, Laurie
 Obrist, Urs
 O'Hagan, Fergal
 Oliveira, Eva
 Oliveria, Claire
 Pasic, Dianna
 Pelcowitz, Matthew
 Peloso, Paul
 Penn, Rebecca
 Pennick, Vicki*
 Petch, Jeremy
 Phillips, Brian
 Pirocchi, Candace
 Pole, Jason
 Polzer, Jessica
 Posen, Andrew
 Posluns, Joanne
 Premji, Stephanie
 Pugliese, Diana
 Pulcins, Indra
 Purdue, Mark
 Quint, Cordula
 Radu, Stefan
 Rael, Elizabeth
 Raj, Anusha

Range, Erika
 Redgriff, Lisa
 Rezaei, Mana
 Richards, Merris
 Rigby, Jane
 Rivillis, Irina
 Rodine, Rob
 Rubisova, Lena
 Russell, Elizabeth
 Sale, Joanna
 Salvini, John
 Sandhar, Bob
 Sanford, Sarah
 Santaguida, Lina
 Santos, Brenda
 Sarnocinska-Hart, Anna*
 Sawler, Tasha
 Scheikanova, Irina
 Schmok, Sandra
 Scott-Dixon, Krista
 Seaton, Bianco
 Severin, Colette*
 Shen, Shafiguzzaman
 Shahidi, Faraz
 Sharma, Sharvani
 Shen, Enqing
 Shields (Erdeljan), Susanne
 Sinclair, Carolyn
 Skivington, Kathryn

Slack, Tesha
 Slater, Morgan
 Smith, Andrea
 Smith, Brendan
 Smith, Jonathan*
 Solway, Sherra
 Spencer, Jason
 Stacy, Sarah
 Su, Philip
 Subrata, Peter*
 Sutton, Debbie
 Swartz, Diane
 Swift, Michael*
 Tang, Ken
 Teow, Christina
 Ting Shek, Yang
 Tonima, Sabrina
 Trevithick, Scott
 Turner, Karen
 Uneke, Okori
 Urquia, Marcelo
 Usher, Amelia
 van der Velde, Gabrielle
 Van Wyk, Paula
 Vermeulen, Marian
 Vidmar, Marjan*
 Walibhai, Nisha
 Wang, Anna
 Wang, Hua*

Wang, Ying
 Wdowczyk, Keith
 Wertman, Jaime
 Wexler, Evelyn
 Widdrington, Heather
 Wilkinson, Victoria
 Williams, Alysha
 Wong, Imelda
 Yanar, Basak
 Yang, Xiaoqing
 Yazdani, Amin
 Yeung, Natalie
 Zarinpoush, Fataneh
 Zhao, Ryan

KNOWLEDGE TRANSFER/ COMMUNICATIONS

Birt, Peter ∞
 Brown, Michael
 Buccat, Kristina*
 Camirand, Deborah ∞
 Cardoso, Siobhan*
 Chapeskie, Alyssa
 Chapeskie, Bryanna
 Cohen, Melissa
 Cooper, Jackie
 Corban, Jason
 Deveaux, Fred

TOP L TO R
 Uyen Vu
 Emile Tompa
 Dwayne Van Eerd
 Shanti Raktoe
 Emma Irvin
 Kim Cullen
 Ben Amick
 Carol Kennedy-Yee
 Joanna Liu



BOTTOM L TO R
 Ron Saunders
 Siobhan Cardoso
 Monique Gignac
 Arif Jetha
 Julie Bowring
 Jacob Etches
 Cynthia Chen
 Teresa D'Elia
 Sabrina Imam
 Kay Nasir



Dubey, Anita
 Dvorak, Jan
 Elias, Christine
 Gibson (Bartram), Jane*[∞]
 Grover, Kelly
 Holland, Carol*
 Keown, Kiera*
 Kiff, Philip
 King, Trevor
 Knowles Chapeski, Kathy
 Kramer, Desre
 Krumme, Kurt
 Larson, Alexis [∞]
 Lupton, Debbie
 MacDonald, Kathy
 Macdonald, Sara*
 Mathur, Reshma
 McCurley, Kevin
 Michaels, Evelynne
 Moser, Cindy*
 Mueller, Megan
 Neilly, Robertt
 Neilson, Cynthia
 Oakley, Steve
 Palloo, Greer*
 Peterson, Brian
 Raymond, Kyle
 Reardon, Rhoda*
 Russo, Katherine*

Saunders, Ron*[∞]
 St. Croix, Chris
 Van Kruistum, Rob
 Vu, Uyen

QUALITY

ACCREDITATION¹
 Anderson, Lynn*
 Badali, Kathy
 deGruyther, Nigel
 Dibert, Stephen
 Elkan, Lyn
 Harris, Diane
 Hennessy, Stephanie [∞]
 Holoyoke, Paul
 Kinzie, Pamela
 McKenzie, Deirdre*

OPERATIONS

Irvin, Emma*[∞]
 Larson, Anne [∞]
 Morassaei, Sara*
 Ridout, John [∞]

LIBRARY

Couban, Rachel*
 Dacombe, Jeremy
 Edmiston, Megan
 Goltzman, Rebecca

Liu, Joanna*
 Lucas, Julie
 Mahood, Quenby*
 Mosnia, Patricia
 Mosnia, Sandro
 Mustard, Maggie
 Nolan, Krista
 Shannon, Dan
 Warnock, Caroline

SYSTEMS

Adamson, Jeffrey
 Cheung, James
 Kaw, Sigmund
 Khorasanchian, Hamid
 Mallinson, David
 Maselli, Paolo*
 Smehyl, Miroslav
 Tiongson, Chester
 Toth, Zoltan
 Wall, Norma
 Wong, Joseph
 Yao, Grant*
 Yau, Jason
 Yu, Richie
 Zitnak, Tim

ADMINISTRATION

Arsenault, Leanne
 Barnett, Heidi
 Campbell, Fiona*
 Çanga, Albana*
 Cullmann, Vickie
 Dollack, Jocelyn
 Ferguson, Brenda*
 Gartner, Vera
 Harlowe, Linda*
 Hayes, Mary
 Heath, Charmaine*
 Hirani, Tazim*
 Hogan, Maria
 Iliopoulos, Melissa
 Kelly, Allison*
 Lefebvre, Camie
 Maniago, Laura
 Mansurova, Lyudmila*
 Mick, Elizabeth
 Mikhael, Anna
 Munro, Virginia
 Padkapayeva, Kathy*
 Palloo, Russell
 Perri, Vincy*
 Raktoe, Shanti*
 Ramond, Hanh
 Resendes, Elizabeth
 Ridout, Darlene

Shaw, Margaret
 Sherman, Elaine
 South, Harriet
 Stevens, Alexandra
 Webb, Alison
 Webster, May

HUMAN RESOURCES / FINANCE

Carby, Llewellyn
 Cicinelli, Mary*[∞]
 Dim, Katrina
 Lee, Sharon
 Maccaroni, Dylan*
 McPherson, Kerry-Ann*
 Prole, Marilyn
 Rafuse-Mitchell, Dawna
 Sir, Cathy*
 Stainton, Elizabeth
 Trevithick, Yuko
 Visavadia, Santok

1. In its early years, the Institute was under contract to the Workers' Compensation Board of Ontario to oversee the accreditation of Ontario's community rehabilitation clinics and regional evaluation centres.

INDEPENDENT AUDITORS' REPORT

TO THE DIRECTORS OF THE INSTITUTE FOR WORK & HEALTH

We have audited the accompanying financial statements of the Institute for Work & Health, which comprise the balance sheet as at December 31, 2015, the statements of operations, net assets and cash flow for the year then ended, and a summary of significant accounting policies and other explanatory information.

BOARD OF DIRECTORS' RESPONSIBILITY

The Board of Directors is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian accounting standards for not-for-profit organizations, and for such internal control as the Board of Directors determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

AUDITORS' RESPONSIBILITY

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the entity's preparation and fair

presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained in our audit is sufficient and appropriate to provide a basis for our audit opinion.

OPINION

In our opinion, the financial statements present fairly, in all material respects, the financial position of the Institute for Work & Health as at December 31, 2015, and the results of its operations and its cash flow for the year then ended in accordance with Canadian accounting standards for not-for-profit organizations.

Stern Cohen LLP

Chartered Professional Accountants
Chartered Accountants
Licensed Public Accountants
Toronto, Canada
April 13, 2016

STATEMENT OF OPERATIONS

For the year ended December 31,	2015 \$	2014 \$
Revenue		
Ontario Ministry of Labour	4,514,481	4,690,370
Grant revenue (Note 6a)	1,876,419	2,177,580
Other	355,808	171,051
Investment income (Note 6b)	17,240	16,301
	6,763,948	7,055,302
Expenses		
Salaries and benefits	5,312,860	5,695,306
Travel	82,095	91,114
Supplies and service	68,414	79,555
Occupancy costs	639,885	635,540
Equipment and maintenance	108,102	95,439
Publication and mailing	55,284	61,002
Voice and data communications	33,579	31,281
Staff training	32,142	30,084
Professional services	212,107	252,577
Other	107,367	44,850
Amortization of capital assets	55,864	60,204
	6,707,699	7,076,952
Excess (deficiency) of revenues over expenses for the year	56,249	(21,650)

See accompanying notes.

STATEMENT OF NET ASSETS

For the year ended December 31,	2015 \$		2014 \$
	Invested in capital assets \$	Unrestricted \$	Total \$
		(Note 6c)	Total \$
Beginning of year	91,025	722,070	813,095
Excess (deficiency) of revenue over expenses for the year	(55,864)	112,113	56,249
Investment in capital assets	42,519	(42,519)	—
End of year	77,680	791,664	869,344

See accompanying notes.

STATEMENT OF CASH FLOW

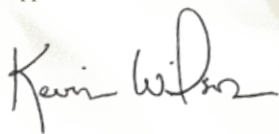
For the year ended December 31,	2015 \$	2014 \$
Operating activities		
Excess (deficiency) of revenue over expenses for the year	56,249	(21,650)
Items not involving cash		
Amortization of capital assets	55,864	60,204
Decrease (increase) in interest receivable	(9,150)	7,402
Adjustment to fair value of short-term investments	7,343	5,630
Working capital from operations	110,306	51,586
Net change in non-cash working capital balances related to operations		
Accounts receivable	86,301	(48,541)
Prepaid expenses and deposits	(49,745)	4,179
Accounts payable	28,820	(170,851)
Deferred revenue	1,224,044	(112,355)
Cash from (required by) operations	1,399,726	(275,982)
Investing activities		
Purchase of capital assets	(42,519)	(35,440)
Short-term investments	(1,024,287)	370,652
	(1,066,806)	335,212
Change in cash during the year	332,920	59,230
Cash beginning of year	314,845	255,615
Cash end of year	647,765	314,845

See accompanying notes.

BALANCE SHEET

As at December 31,	2015 \$	2014 \$
Assets		
Current assets		
Cash	647,765	314,845
Short-term investments (Note 2)	2,098,971	1,071,870
Accounts receivable (Note 3)	416,372	503,680
Prepaid expenses and deposits	157,683	107,938
	3,320,791	1,998,333
Capital assets (Note 4)	77,680	91,025
	3,398,471	2,089,358
Liabilities		
Current liabilities		
Accounts payable	251,683	222,863
Deferred revenue (Note 5)	2,277,444	1,053,400
	2,529,127	1,276,263
Net assets		
Invested in capital assets	77,680	91,025
Unrestricted	791,664	722,070
	869,344	813,095
	3,398,471	2,089,358
Other information (Note 6) See accompanying notes.		

Approved on behalf of the Board:



Director



Director

NOTES TO FINANCIAL STATEMENTS

The Institute for Work & Health was incorporated without share capital on December 20, 1989 as a not-for-profit organization.

The Institute is an independent, not-for-profit research organization with a mission to promote, protect and improve the safety and health of working people by conducting actionable research that is valued by employers, workers and policy-makers.

The Institute is predominantly funded by the Ontario Ministry of Labour (MOL) up to the Institute's approved MOL budget. Other revenues are generated through research activities and certain interest earned.

1. Significant accounting policies

These financial statements were prepared in accordance with Canadian accounting standards for not-for-profit organizations and include the following significant accounting policies:

(a) Capital assets

Capital assets are stated at cost. Amortization is recorded at rates calculated to charge the cost of the assets to operations over their estimated useful lives. Maintenance and repairs are charged to operations as incurred. Gains and losses on disposals are calculated on the remaining net book value at the time of disposal and included in income.

Amortization is charged to operations on a straight-line basis over the following periods:

Furniture and fixtures—5 years
Computer equipment—3 years
Leaseholds—term of the lease

The Institute has a policy to derecognize capital assets when fully amortized.

(b) Revenue recognition

The Institute follows the deferral method of accounting for contributions. Restricted contributions, which are contributions subject to externally imposed criteria that specify the purpose for which the contribution can be used, are recognized as revenue in the year in which related expenses are incurred. Unrestricted contributions, which include contributions from the MOL, are recognized as revenue when received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured.

Revenue in excess of expenditures from fee-for-service contracts is recognized at the completion of the contract.

Investment income from interest and dividends is recognized on an accrual basis and changes in fair value of investments are recognized in excess of revenue over expenses.

(c) Short-term investments

Short-term investments are recorded at fair value.

(d) Use of estimates

The preparation of financial statements in conformity with Canadian accounting standards for not-for-profit organizations requires the Institute to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenditures during the year. Actual results could differ from these estimates.

(e) Financial instruments

The Institute's financial instruments consist of cash, short-term investments, accounts receivable, accounts payable and deferred revenue. The Institute has elected to measure all financial instruments, other than investments, at cost or amortized cost.

2. Short-term investments

	2015 \$	2014 \$
Guaranteed Investment Certificates	1,694,307	810,168
Money Market Mutual Fund	404,664	261,702
	2,098,971	1,071,870

The Guaranteed Investment Certificates earn an average interest of 1.85% and mature at various dates between 2016 and 2020.

3. Accounts receivable

	2015 \$	2014 \$
Foundation for Research and Education in Work and Health Studies	64,372	108,933
Other	321,057	314,529
HST rebate	30,943	80,218
	416,372	503,680

4. Capital assets

	Cost \$	Accumulated amortization \$	Net 2015 \$	Net 2014 \$
Furniture and fixtures	19,126	9,563	9,563	13,388
Computer equipment	231,245	169,615	61,630	69,340
Leaseholds	9,051	2,564	6,487	8,297
	259,422	181,742	77,680	91,025

5. Deferred revenue

The Institute records restricted contributions as deferred revenue until they are expended for the purpose of the contribution.

	2015 \$	2014 \$
Opening balance—deferred revenue	1,053,400	1,165,755
Less: revenue recognized	(1,876,419)	(2,177,580)
Add: current year funding received	3,100,463	2,065,225
Ending balance—deferred revenue	2,277,444	1,053,400

The details of the deferred revenue balance are as follows:

	2015 \$	2014 \$
Canadian Institutes of Health Research	938,665	514,987
Ministry of Labour Research Opportunities Program	849,608	160,259
World Health Organization	51,180	62,473
Workers Compensation Board—Manitoba	50,077	79,912
Max Bell	48,828	—
Parachute	35,500	—
Public Services Health & Safety Association	34,493	—
Memorial University	32,844	—
WorkSafe BC	25,017	4,171
Workplace Safety and Insurance Board—Research Advisory Committee	13,987	40,949
Canadian Arthritis Network	7,693	8,450
Other	189,552	182,199
	2,277,444	1,053,400

6. Other information

(a) Grant revenue

	2015 \$	2014 \$
Canadian Arthritis Network	756	8,791
Canadian Institutes of Health Research	760,243	1,126,366
Cancer Care Ontario	45,299	94,832
Foundation for Research and Education in Work and Health Studies	47,387	85,733
Harvard	—	968
Max Bell	33,672	—
Memorial University	26,696	29,206
Ontario Ministry of Labour—Research Advisory Committee	—	23,937
Ontario Ministry of Labour—Research Opportunity Program	282,484	57,711
Workplace Safety and Insurance Board—Ontario Ministry of Labour Supplemental	—	198,105
Ontario Ministry of Labour	397,500	—
Ontario Construction Secretariat	—	69,471
Social Sciences and Humanities Research Council	9,148	—
University of Texas	23,119	—
Workers Compensation Board—Manitoba	120,959	71,375
WorkSafe BC	35,686	22,054
World Health Organization	11,293	35,494
Workplace Safety and Insurance Board—Research Advisory Committee	27,326	336,288
Public Services Health & Safety Association	30,993	—
Other	23,858	17,249
	1,876,419	2,177,580

(b) Reconciliation of investment income

The investment income of the Institute includes the following:

	2015 \$	2014 \$
Interest	24,583	21,931
Loss on adjustment to fair value	(7,343)	(5,630)
Total	17,240	16,301

(c) Unrestricted net assets

Unrestricted net assets are not subject to any conditions that require they be maintained permanently as endowments or that otherwise restrict their use.

	2015 \$	2014 \$
Total assets	3,398,471	2,089,358
Invested in capital assets	(77,680)	(91,025)
	3,320,791	1,998,333
Liabilities	(2,529,127)	(1,276,263)
Unrestricted net assets	791,664	722,070

(d) Pension

For those employees of the Institute who are members of the Healthcare of Ontario Pension Plan, a multi-employer defined benefit pension plan, the Institute made \$321,671 contributions to the plan during the year (2014—\$338,662).

(e) Commitments

The Institute is committed under a lease for premises that expires July 31, 2019, with annual rents, exclusive of operating costs, as follows:

	\$
2016	279,000
2017	302,000
2018	302,000
2019	176,000
	1,059,000

(f) Financial instruments

It is management's opinion that the Institute is not exposed to significant interest rate, currency, market or credit risks arising from its financial instruments.

BOARD OF DIRECTORS

CHAIR

Kevin Wilson
(as of March 2015)
Former Assistant Deputy Minister
Policy Program and Dispute
Resolution Services
Ontario Ministry of Labour

Jerry Garcia
(until February 2015)
Executive Consultant
TFH Canada Inc.

DIRECTORS

Melissa Barton
Director
Organizational Development
& Healthy Workplace
Sinai Health System

Mark Dreschel
Vice-President
Health, Safety & Environment
Bird Construction

Lewis Gottheil
Legal Counsel and Director
Legal Department
Unifor

David Henry
(until September 2015)
Senior Scientist and former Chief
Executive Officer
Institute for Clinical Evaluative
Sciences

Melody Kratsios
Director, Business Development
KSH Solutions Inc.

Lisa McCaskell
Senior Health and Safety Officer
Ontario Public Service Employees
Union

Cameron Mustard
President and Senior Scientist
Institute for Work & Health

Norman Rees
Former Chief Financial Officer
Public Health Ontario

Emily Spieler
Edwin Hadley Professor of Law
Northeastern University (Boston)

Michael Wolfson
Canada Research Chair in
Population Health Modelling
Faculty of Medicine
University of Ottawa

SCIENTIFIC ADVISORY COMMITTEE

CHAIR

Emily Spieler
Edwin Hadley Professor of Law
Northeastern University
U.S.A.

COMMITTEE MEMBERS

Les Boden
Professor, School of Public Health
Boston University
U.S.A.

Walter Eichendorf
Deputy Director General
German Social Accident Insurance
(DGUV)
Germany

John Frank
Director
Scottish Collaboration for Public
Health Research and Policy
United Kingdom

Andrew Hale
Professor Emeritus of
Safety Science
Delft University
The Netherlands

Maurits van Tulder
Professor of Health Technology
Assessment
VU University
The Netherlands

Eira Viikari-Juntura
Research Professor
Finnish Institute
of Occupational Health
Finland

Greg Wagner
Adjunct Professor
of Environmental Health
Harvard School of Public Health
U.S.A.

Margaret Whitehead
W.H. Duncan Chair of Public Health
Faculty of Medicine,
University of Liverpool
United Kingdom

Thomas Wickizer
Stephen F. Loeb Professor
Ohio State University
U.S.A.

KNOWLEDGE TRANSFER & EXCHANGE ADVISORY COMMITTEE

CHAIR

Peter Birt
Manager
Communications and
Government Relations
Ontario Nurses' Association

COMMITTEE MEMBERS

David Clements
Executive Director
Healthcare Innovation Secretariat
Health Canada

Ann Morgan
President and
Disability Prevention Specialist
Working for Health

Maria Papoutsis
Director
Health and Safety Policy Branch
Ontario Ministry of Labour

David Phipps
Director
Research Services and
Knowledge Exchange
York University

Jill Ramseyer
Senior Manager
Health & Wellness
The TDL Group

Cheryl Tucker
Executive Director
Association of Workers'
Compensation Boards
of Canada

Gordon Vala-Webb
Principal, Building Smarter
Organizations

ABOUT THE INSTITUTE

The Institute for Work & Health (IWH) is an independent, not-for-profit research organization. Our mission is to promote, protect and improve the safety and health of working people by conducting actionable research that is valued by employers, workers and policy-makers.

WHAT WE DO

Since 1990, we have been providing research results and producing evidence-based products to inform those involved in preventing, treating and managing work-related injury and illness. We also train and mentor the next generation of work and health researchers.

HOW WE SHARE OUR KNOWLEDGE

Along with research, knowledge transfer and exchange is a core business of the Institute. IWH commits significant resources to put research findings into the hands of our key audiences. We achieve this through an exchange of information and ongoing dialogue with our audiences. This approach ensures that research information is both relevant and applicable to their decision-making.

HOW WE ARE FUNDED

Our primary funder is the Province of Ontario. Our scientists also receive external peer-reviewed grant funding from major granting agencies.

OUR COMMUNITY TIES

The Institute has formal affiliations with four universities: McMaster University, University of Toronto, University of Waterloo and York University. Because of our association with the university community and our access to key data sources, IWH has become a respected advanced training centre. We routinely host international scientists. In addition, graduate students and fellows from Canada and abroad are also associated with IWH. They receive guidance and mentoring from scientific staff, and participate in projects, which gives them first-hand experience and vital connections to the work and health research community.



**Institute
for Work &
Health**

Research Excellence
Advancing Employee
Health

481 University Avenue, Suite 800
Toronto, Ontario, Canada M5G 2E9
T: 416.927.2027 F: 416.927.4167
E: info@iwh.on.ca

www.iwh.on.ca