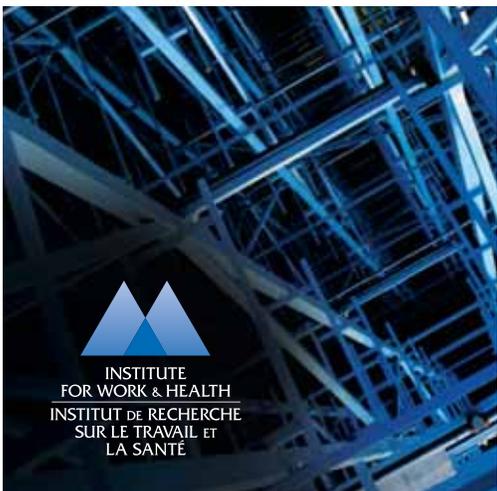




# Evidence at Work

Institute for Work & Health  
Annual Report 2006



INSTITUTE  
FOR WORK & HEALTH  
INSTITUT DE RECHERCHE  
SUR LE TRAVAIL ET  
LA SANTÉ

#### **The Institute at a Glance**

The Institute for Work & Health (IWH) is an independent, not-for-profit research organization. Our mission is to conduct and share research with workers, labour, employers, clinicians and policy-makers to promote, protect and improve the health of working people.

#### **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. The 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. This ensures that research information is both relevant and applicable to stakeholder decision-making.

#### **How We Are Funded**

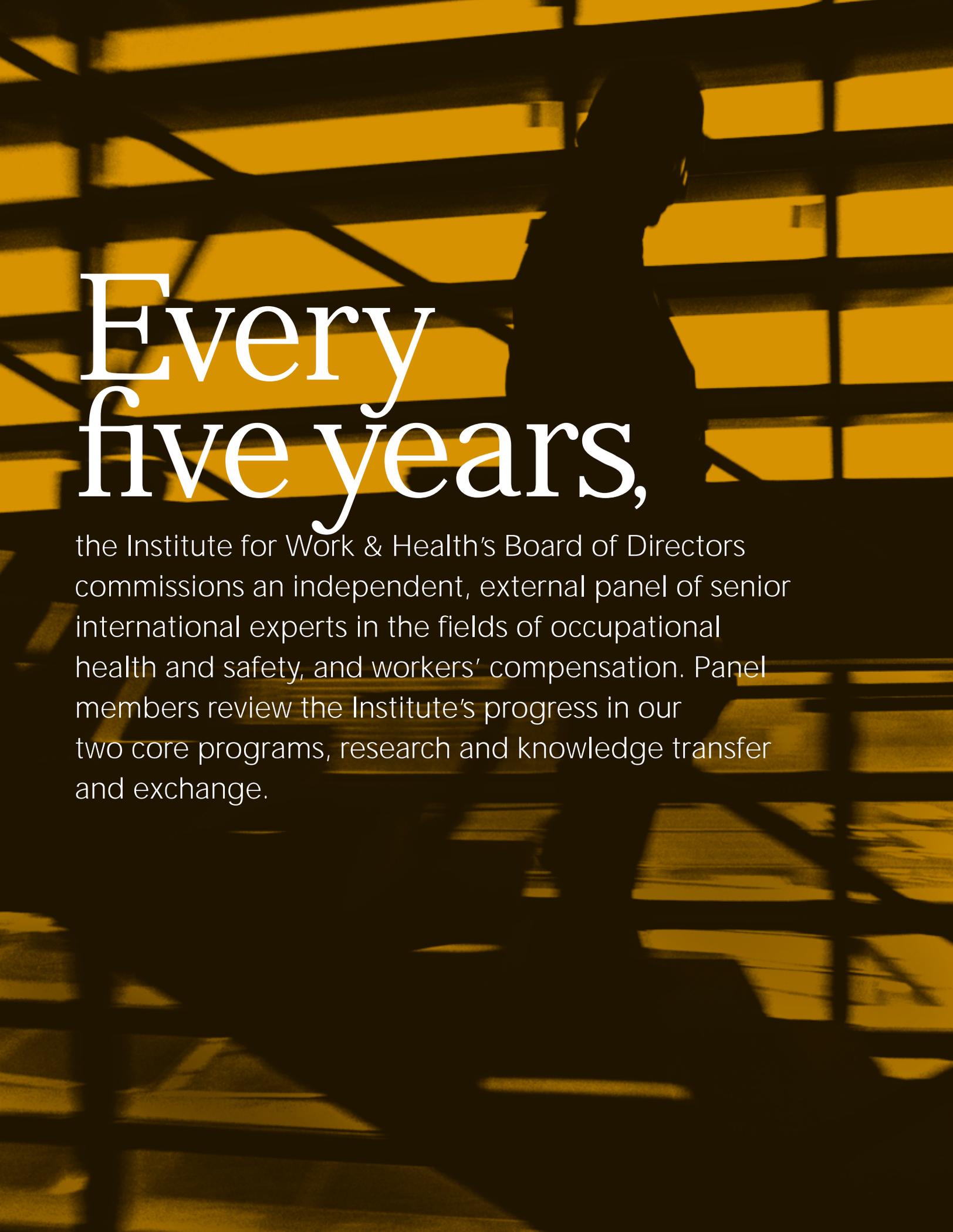
Our primary funder is the Ontario Workplace Safety & Insurance Board (WSIB). Our scientists also receive external funding from major peer-reviewed granting agencies.

#### **Our Community Ties**

The Institute has formal affiliations with four Ontario universities: McMaster University, University of Toronto, University of Waterloo, and York University. The Institute's association with the university community and its access to workplaces and key sources of data have made it a respected advanced training centre. Over the last several years, IWH has hosted a number of international scientists. Graduate students and fellows are also associated with the Institute. They receive guidance and mentoring from scientific staff and participate in projects, which give them first-hand experience and vital connections to the work and health research community.

# 2006 at the Institute

At the Institute for Work & Health, we conduct and share research focusing on the health of working people. To assess the quality, productivity and impact of our work, an international review panel was commissioned to examine our research and knowledge transfer activities between 2002 and 2006. In our 2006 Annual Report we highlight key findings from the panel's report. We also showcase the impact we've had in two important areas: in the prevention of work-related injury, and in returning injured workers to work.



# Every five years,

the Institute for Work & Health's Board of Directors commissions an independent, external panel of senior international experts in the fields of occupational health and safety, and workers' compensation. Panel members review the Institute's progress in our two core programs, research and knowledge transfer and exchange.

## Message from the President and Chair

The most recent Five-year Review Panel was convened to assess the Institute's work from 2002 to 2006. The panel met in early 2007. In its report to the Board, the panel noted the "remarkable progress" the Institute has made during these years in expanding its emphasis on prevention of workplace injury, in the strengthening of knowledge transfer and exchange activities, and in solidifying strong ties with professionals in primary prevention and work disability prevention.

The personal and financial costs of workplace injury are high. More than \$6.7 billion in compensation and health-care benefits were paid in 2005 to workers across Canada who were injured on the job, emphasizing the urgency of finding innovative ways to effectively prevent injuries at work.

In this annual report, we highlight key findings from the assessment of the Five-year Review Panel. Along with this summary of findings, we have included a selection of case studies of the impact of our research.

The Five-year Review Panel made a particular note of recognizing the Institute's advances in knowledge transfer and exchange – specifically, our developments in stakeholder relationships. In 2006, several projects at the Institute involved stakeholders' input. Our Systematic Review Program engaged stakeholders in developing review questions and in forming conclusions based on the results from the reviews. Our ongoing relationships with work and health professionals increased our awareness of specific questions that were important in helping them to prevent workplace injuries and assist injured workers' return to work.

The result is that our work does have an impact in practice. For instance, one Institute systematic review examined which factors were important in returning injured workers safely to work. Based on the review's findings, a team composed of researchers, knowledge transfer and exchange staff and colleagues from the Workplace Safety & Insurance Board developed the "Seven Principles of Successful Return to Work." Employers, insurers and workers have used these principles as a starting point to talk about return to work.

Our efforts would not be possible without the talents of the Institute's staff working in research, knowledge transfer and exchange, library services and information, systems, and administrative support. In 2006, many staff made outstanding contributions to the Institute.

In particular, we would like to acknowledge Dr. Anthony Culyer. Culyer, who joined the Institute in 2003 as our Chief Scientist, helped to launch our Systematic Review Program. During Culyer's three-year tenure, he also helped to further integrate knowledge transfer and exchange into the research process. Culyer is currently the Chair of the Research Advisory Council of the Workplace Safety & Insurance Board, and is consulting for Cancer Care Ontario.

After an extensive international search, Dr. Benjamin C. Amick III was appointed as the Institute's Scientific Director in January 2007. He was formerly a professor in the School of Public Health at the University of Texas in Houston. Amick is no stranger to the Institute. He has been an Institute Adjunct Scientist since 1997 and has worked on several Institute projects, including a systematic review on interventions to prevent musculoskeletal injuries in health-care workers.

In 2007, we will be developing a strategic plan for the Institute for the next five years, based in part on the guidance we've received from the review panel. We will consult with many parties in developing this plan to ensure that we continue to make positive and lasting improvements in preventing work-related injury and illness, and in finding the best ways to get workers back to their jobs safely.

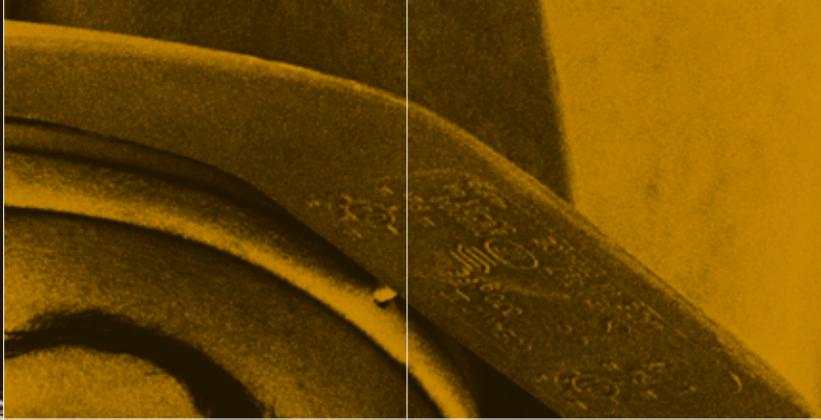


Dr. Roland Hosein  
Chair, Board of Directors



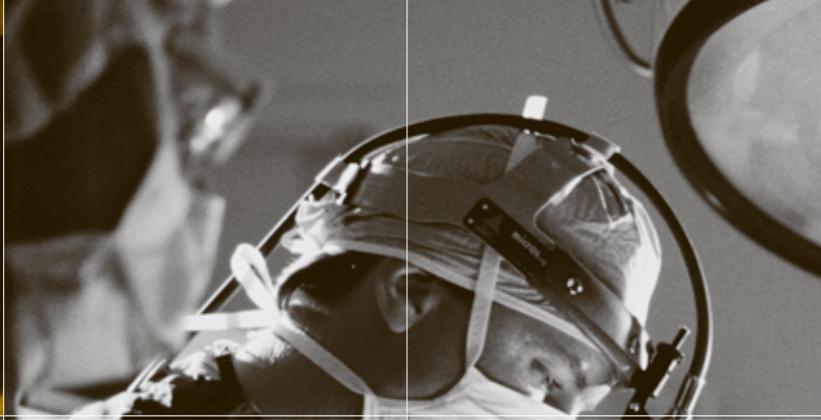
Dr. Cameron Mustard  
President





“...the Institute for Work & Health easily ranks among the top five such institutes in the world.”

From the report of the International Five-year Review Panel



# Evidence at Work

What are the best approaches to prevent injury in workers and sustain a healthy workforce? And if workers are injured at work, what are the best ways to successfully integrate them back into their jobs and prevent re-injury? These two issues – prevention and return to work – form a fundamental part of the work that we do at the Institute for Work & Health (IWH). Conducting quality research to find answers is one aspect of this work. Another is to ensure that the findings are being used in practice, through our knowledge transfer and exchange activities (KTE). We've done well in both areas over the past five years, according to an independent review panel. Commissioned by IWH's Board of Directors, the panel had a mandate to look at the quality, productivity and impact of the Institute's work from 2002 to 2006. The seven members on the panel, who had expertise in compensation systems, occupational health and safety, labour and law, hailed from Canada, the United States, the United Kingdom and Germany.



“The knowledge transfer and exchange program (KTE) is one of the IWH’s distinctive features and is recognized internationally for its leading practices.”



The panel praised our research activities, including student training opportunities, our interdisciplinary approach, and the quality and breadth of our research. Panel members also applauded our KTE department. At the Institute, KTE provides the link between scientists and research users to ensure our research is relevant and findings are accessible. We achieve these goals by engaging these audiences, from the initial stage of selecting the questions to be researched, to finding ways to share and promote the evidence.

Our 2006 Annual Report puts the panel’s findings into context – the context of the research we conduct in the areas of prevention and return to work, and the context of the vital connections between research and KTE – to show the impact we’ve had in transferring high quality research evidence into practice.

**The review panel’s report**

The review panel convened over three days in Toronto, meeting with Institute staff and more than 60 individuals from 18 different groups. The groups represented researchers, clinicians, health and safety association staff, employers, organized labour, students, policy-makers and injured workers’ representatives. More than 40 additional individuals provided written submissions.

The panel’s report provided an assessment of our activities and made recommendations to the Institute’s Board of Directors. Overall, the panel recommended that IWH’s overarching focus should remain on two broad areas – on developing effective strategies for the primary prevention of work-related injuries and secondary prevention of long-term disability among injured workers. Secondary prevention includes clinical management, return to work and disability management practices.

**Our researchers and students**

The Institute’s work is “unique and robust” because of the range of disciplines represented on projects, the panel noted in its report. IWH researchers have backgrounds in medicine, epidemiology, psychology, kinesiology, economics and other areas. The variety in scientific perspective has been further enhanced

by relations with non-research partners, through the efforts of KTE staff, led by Jane Gibson, Director.

The Institute has also provided training and research opportunities for students in many of these disciplines. Over the past five years, approximately 70 graduate students, post-doctoral fellows, sabbaticants and visiting scholars have worked at the Institute. All of the students who appeared before the panel indicated that the Institute provided a “rich training ground” for strengthening their research skills.

**Working together**

Researchers and KTE staff have worked together closely in the Institute’s systematic review program. The panel noted the growing strength of this four-year program, which was funded by Ontario’s Workplace Safety & Insurance Board (WSIB). As part of this process, KTE staff first query stakeholders to identify relevant topics for reviews. After refining a review question with input from stakeholders, the review team scans research studies from around the world. They assess the quality of each study and form answers to the review question. After this stage, they present the findings to stakeholders to help shape messages on the evidence.

The panel noted that several reviews had the potential to directly influence workplace practices. Reviews conducted in 2006 were on risk factors for youth and occupational disease, and on preventing soft-tissue, or musculoskeletal disorders (MSDs), in health-care workers.

**Systematic reviews involve stakeholders**

Representatives from health and safety associations, policy-makers, employers, labour and clinicians have all been invited to contribute to the Institute’s prevention systematic reviews. One rationale is that participation by stakeholders has been shown to increase the uptake of research. Input from stakeholders has also helped ensure that the reviews were relevant.

In 2006, KTE staff invited kinesiologists who belonged to one of our clinical networks to discuss a systematic review on the question: “Do office interventions among computer users have an effect on musculoskeletal (MSK) and visual health status?”

Left: Jane Gibson, Director, Knowledge Transfer and Exchange

“The Institute provides a thriving multidisciplinary, team-based environment that is very attractive to researchers and students alike ... indeed, it is a leading training site for graduate students and post-doctoral fellows in many disciplines.”



The kinesiologists were presented with findings from the review. For instance, they heard that there was moderate evidence that alternative keyboard pointing devices prevented MSK symptoms in workers, compared to those who used the traditional computer “mouse.”

The researchers got a “practice perspective” on how research results might influence service provision. Together, the kinesiologists and Institute staff translated the findings into “messages” for other kinesiologists and work/health researchers. Participants appeared eager to share the findings with fellow kinesiologists.

This enthusiasm has been shown by other stakeholders. In December, 2006, seven stakeholders participated in a teleconference with the Workplace Safety & Insurance Board’s Prevention Reviews Initiative Advisory Committee, which funds the Institute’s prevention systematic reviews. Their feedback was unanimously positive.

Participants noted that it was cost-effective and efficient to have the Institute perform these reviews, compared to a non-research organization. They indicated that evidence from these reviews had already been incorporated into the development of products and programs in Ontario’s health and safety associations. Review findings also supported policy and program development within Ontario’s Ministry of Labour. In the clinical arena, having the most up-to-date information was reported to have a positive impact on reputations with clients.

---

Beyond systematic reviews, researchers and KTE staff work together in a variety of other ways. One area is in the prevention of injury and illness in young workers, which has been an important area of research for IWH. A multi-faceted approach has been taken to promote these findings.

### Sharing evidence on young and new workers

Scientist Dr. Curtis Breslin has conducted studies to explore why there is an elevated risk of injury among young workers. In one study, he found that regardless of age, workers were more likely to be injured in the first month on the job than at any other time. This suggests that some of the increased risk of injury among young workers can be explained by a generic risk factor – being new on the job – which they experience more often than older workers.

In 2005, Dr. Breslin had completed a systematic review to determine the risks of injury among young workers. The review found that the number of work hazards on a job site and perceived work overload were both associated with increased risk.

Both the provincial government and the WSIB have used evidence from the systematic review in their ongoing programs. For example, the opening line of the WSIB’s 2006 Young Workers Social Marketing Campaign – “You are more likely to be injured in your first month on the job than at any other time.” – comes directly from Dr. Breslin’s research.

These findings were also promoted by KTE staff in several ways. They engaged policy-makers early in the research process, through briefings and via Dr. Breslin’s participation on several committees.

KTE staff have also created plain language summaries of the systematic review findings; published articles in *At Work*, the Institute’s quarterly newsletter; and conducted briefings with the Workplace Safety & Insurance Board (WSIB), the Ontario ministries of labour and health, and with other health and safety groups.

---

### Working with prevention partners

The panel noted that the Institute’s research portfolio addressed the priority areas of our funder, Ontario’s Workplace Safety & Insurance Board. However, the Institute has responded to the targeted priorities of other stakeholders by working collaboratively, the panel also observed.



Left: Curtis Breslin, Scientist



“The willing participation of research partners and stakeholders in the review process speaks highly of the Institute’s broad engagement in the field and the respect that it has garnered.”



For instance, Institute President Dr. Cameron Mustard is a member of the Occupational Health and Safety Council of Ontario (OHSCO), along with senior representatives from other organizations working in prevention, including the WSIB, Ministry of Labour and health and safety associations.

---

#### Aligning with Ontario's prevention system

Many organizations in Ontario are working toward a common goal of preventing workplace-related injuries and disabilities. To identify priorities and respond in a coordinated way, senior representatives from these groups have joined together under the banner of the Occupational Health and Safety Council of Ontario (OHSCO).

The Institute joined OHSCO in 2003, contributing to the alignment of priorities and activities in the Ontario prevention system. In 2006, the Institute made scientific contributions to the development of the Ontario MSD Prevention Guideline.

The *MSD Guideline and Resource Manual* present a framework and direction to prevent musculoskeletal disorders (MSDs) at work, through recognizing and controlling hazards in workplaces. MSDs are injuries to muscles, tendons and other soft tissues, and they represent 42 per cent of all lost-time compensation claims in Ontario.

In another major research project on prevention, the Institute is conducting an evaluation of the impact of the Ontario Patient Lift program. The province's Ministry of Health and Long-term Care has invested more than \$80 million to purchase and install patient lifts in chronic care and long-term care facilities. This project is being conducted in partnership with scientists at the Toronto Rehabilitation Institute, the Centre of Research Expertise in the Prevention of Musculoskeletal Disorders (CRE-MSD) and the University of Western Ontario.

---

Beyond this alignment at senior levels, the panel also recommended more interaction on projects at the workplace level.

Left: Phil Bigelow, Scientist

Panel members suggested that researchers could benefit from greater exposure to workplace sites and workers themselves to be even more effective and deepen their understanding of workplaces.

In the prevention area, several such research projects are underway. One example concerns the use of the safety climate survey, which could be important in predicting workplace injury and reducing injury rates.

---

#### Safety climate and injury prevention

One approach to predicting work-related injuries is to monitor a company's safety climate. Safety climate refers to employees' shared perception of the value their leader and organization place on safety.

Measuring safety climate, and improving it, could provide a way to reduce workplace injuries.

“Safety climate provides a proactive approach to forecasting injury or illness in the workplace,” says Institute Scientist Dr. Phil Bigelow, who has been involved in several safety climate projects. “If safety climate monitoring were introduced into standard business practice, it would provide a warning of potential concerns and allow firms to take actions to avoid unnecessary injuries and their associated costs.”

Safety climate is considered a leading indicator, as it provides a sense of a company's safety performance and potential for injuries before they occur. A company's safety climate is determined using the Safety Climate Survey, which is an anonymous questionnaire completed by employees.

Dr. Bigelow has been collaborating with IWH Adjunct Scientist Dr. Dov Zohar, an Israeli scientist who pioneered safety climate research in the early 1980s and who remains a leading researcher in the field.

Dr. Bigelow is studying whether the safety climate improves in companies after the implementation of health and safety interventions. Two studies are currently underway – one is being done in collaboration with Ontario's Electrical & Utilities Safety Association; the other involves the province's Industrial Accident Prevention Association.

“The scientists are clearly motivated to have impact and create change through their research.”



“The Institute has been involved in two main directions in safety climate research,” says Dr. Zohar, who worked as a visiting scientist at the Institute between 2003 and 2005. “One direction is in implementing a new approach for safety climate improvement through safety leadership development. This project took place during my stay at IWH, using a large steel production company in Nova Scotia, and it resulted in a significant improvement in their safety records.” The other area is in validating the survey as predictors of a company’s health and safety outcomes, he said.

Institute scientists, working with external partners, have also engaged several of Canada’s major banks and insurance companies in a project to improve disability management practices.

---

#### **Disability management benchmarking**

Canadian employers pay a high price to cover the costs of worker disability. There is evidence to suggest that by adopting “best practices” in disability management, employers could improve services and save money.

However, there are a number of barriers to doing so. For instance, most employers want to see proof of cost-savings from a comparable organization before investing in changes in their own. While independent research could provide this type of information, it takes great effort for researchers to establish relationships with individual employers or private insurers, who may be reluctant to share their data on disability costs and responses.

The Workplace Disability Management Benchmarking (WDMB) Collaborative, which is based at the Institute for Work & Health, was created to tackle these barriers. The premise is simple. Workplaces that participate provide information on their disability management experiences, and the findings are pooled.

“The project gives companies an incentive to participate,” says Senior Scientist Dr. Donald Cole, who helped initiate it. “The results will provide companies with indicators on how well they are doing, relative to their peers.”

Left: Donald Cole, Senior Scientist

The collaborative is a combined effort of the Institute, Clarke Brown Associates, Organizational Solutions and workplaces. So far, the companies on board include five major Canadian banks, three large insurance companies, and three other organizations including McMaster University in Hamilton.

“What I’m hearing consistently is that there isn’t any other organization, besides the Institute, which can bring all these parties together to share best practices,” says Leslie Stephenson, leader of the WDMB project. “The Institute has helped create a bridge between scientists and relevant corporate executives, such as those in human resources.”

The collaborative began piloting a set of measures. Their approach builds on the success of a similar American initiative called the Employer Measures of Productivity, Absence and Quality (EMPAQ). The benchmarking has three components, which will measure disability management outcomes, processes and the satisfaction of all participants.

---

#### **The breadth and nature of research**

The panel was impressed with the number and breadth of research projects at the Institute. At the time of the review, there were 79 projects underway, including studies of statistical methods, ways to measure workers’ health and functioning, prevention of injury, workplace interventions, the impacts of insurance and regulation, and studies that looked at trends or issues in populations or specific workforces.

Panel members noted that the Institute was well regarded for its strength in studies with a range of research designs, including methodology and qualitative research. In 2006, Institute researchers also published a discussion paper that has had considerable impact in Ontario. The paper, which promotes the idea of integrating primary and secondary prevention, was developed after consultation with researchers and stakeholders.



“The Institute’s scientific staff have achieved a consistently high collective success rate in the range of 50 to 60 per cent for competitive grants...the ability of these researchers to attract increasing levels of peer-reviewed funding attests to the quality of the Institute’s work.”



### Integrating prevention approaches

The prevention of work-related injury and disability focuses on two challenges: first, how do we protect workers from injury and disease? And second, what is the best way to reduce the severity or duration of disability after the onset of an injury or illness?

Primary prevention is addressed by workplace health and safety programs. The second challenge, sometimes termed secondary prevention, is the focus of effective clinical management, and return-to-work and disability management programs.

Within workplaces, these two functions are often delivered by separate teams. A similar separation has evolved in the Ontario prevention system. Health and Safety Associations (HSAs), based by sector, have historically focused on education and safety training, whereas disability management consulting services, often commissioned from inside human resources departments, have been used to address return to work after injury.

But, argue Institute researchers Dr. John Frank, Kim Cullen and their collaborators at IWH, “an optimal effort ... must build on the strengths of traditional primary and secondary prevention approaches, merging these to create a more effective strategy.” They published a discussion paper that promotes this theme in the *Scandinavian Journal of Work, Environment & Health* in 2006.

As Dr. Frank and Cullen noted, several studies have shown that integrated, multi-pronged programs work best. They described two studies that targeted one form of prevention, which had unexpected positive effects on the other type.

“Synergistic injury prevention and disability management initiatives appear to make more efficient use of available resources (both personnel and financial)

and should lead to more sustained improvements in workplace injury, illness and disability outcomes,” they wrote.

This message has influenced key stakeholders in the Ontario health and safety system. In 2006, the Industrial Accident Prevention Association (IAPA) – the province’s largest HSA – commissioned an external consultant to evaluate the feasibility of IAPA broadening its services to include disability management consulting.

Also in 2006, the Workplace Safety & Insurance Board (WSIB) provided funding to the Municipal Health and Safety Association to conduct a pilot demonstration incorporating disability management consulting into its services.

---

### Number of grants increases

The Institute’s research activity has grown over the past years, the panel observed. Our core funding, from Ontario’s Workplace Safety & Insurance Board, has been consistent over the past five years. The additional funding that supports the growth – which represented 34 per cent of the Institute’s total budget in 2006 – came from competitive grant funding.

In 2006, for instance, a major grant of \$1 million was awarded by the Social Sciences and Humanities Research Council of Canada to a research team co-led by an Institute scientist. This team will be looking at the long-term consequences of work injury. For instance, they will examine how various programs and practices affect workers after an injury and over time.

---

### Studying the consequences of work injury

For many years, groups representing injured workers have been seeking reliable information on the long-term consequences of work injury. In an effort to meet this need, researchers at the Institute have joined with injured workers, community groups and other scientists to establish a unique research alliance.

Left: John Frank, Senior Scientist



“KTE has been key to translating the Institute’s research findings into practical and useful tools and products.”



The group worked together for two years developing the initiative before applying for funding to conduct research on the consequences of work injury. In 2006, they received a \$1 million funding award from the Community-University Research Alliance (CURA), which is a program of the Social Sciences and Humanities Research Council of Canada. The application was one of 13 successful proposals selected from 124 original submissions to the competition.

The initiative is named “Research Action Alliance on the Consequences of Work Injury.” The academic lead is Institute Scientist Dr. Emile Tompa.

Over a five-year period, the alliance will study and report on several aspects of the consequences of workplace injury. For example:

- Researchers will explore how legislation, policies, programs and practices affect injured workers immediately after injury and over time.
- They will also study injured workers’ long-term financial security, their work situations, and factors that bear on their health and well-being.
- They will examine the history of injured workers and their role in political activism.

One goal is to provide evidence that can be used to inform policies affecting injured workers. Another goal is to equip injured workers with the skills they need to take part in setting the research agenda, to share evidence and to influence policy change. The funding for this grant is administered through McMaster University.

#### KTE activities

The Institute has been at the forefront of developing ideas and strategies in knowledge transfer and exchange (KTE). The panel in particular noted KTE staff’s work in developing networks of educationally influential (EI) clinicians, and in developing practical tools for stakeholders to use.

EI clinicians are informal opinion leaders. They are identified by their peers through a structured process. The Institute developed these networks as a way of sharing research findings and learning about practice issues. Currently, there are EI networks of physiotherapists, occupational therapists, occupational health nurses, kinesiologists, family physicians and chiropractors.

#### Doctors’ network puts research into practice

How do you get busy family doctors to use the latest research evidence in their clinical practices? One approach is to produce attractive, easy-to-use tools developed by a reliable source. When such tools are also promoted by respected peers, it is likely that clinicians’ confidence in the product will increase.

In 2005, the Institute’s KTE department started developing an evidence-based tool kit on treating patients with acute low-back pain. The project was undertaken with several partners, including the Guidelines Advisory Committee, the College of Physicians and Surgeons of Ontario, the Ontario College of Family Physicians and the Knowledge Translation Program at the University of Toronto.

The partnership group used a network of 200 Ontario physicians who had already been identified by their peers as “educationally influential.” At an initial meeting, doctors provided feedback on the content for a proposed tool kit. They indicated they were interested in chronic back pain as well as acute low-back pain, and that they would like information on working with the Workplace Safety & Insurance Board.

The result, completed in 2006, was a low-back pain tool kit containing several items in a convenient, brochure-sized folder. The kit contains:

- An Evidence Summary for the Management of Non-specific Chronic Low-Back Pain.
- A patient education booklet.
- A prescription pad for the self-management of low-back pain.

Left: Emile Tompa, Scientist



“...These three defining features of the IWH’s approach – relevant and consequential research, knowledge transfer and exchange expertise, and engagement with stakeholders – have enabled the Institute to achieve a greater impact than would otherwise be possible.”

- A pocket “red flag/yellow flag” indicator card.
- The 3-Minute Back Exam CD.
- A Physician’s Reference Guide to the Workplace Safety & Insurance Board (WSIB).

At the end of 2006, the tool kit was sent out to all 200 EI physicians in Ontario.

---

Relationships with stakeholders have also helped the Institute to put our practical products into wider use, such as the doctor’s tool kit and the *Seven Principles of Successful Return to Work*. In fact, the panel suggested increasing our efforts to bring more stakeholders together, particularly from the workplace, at the early stages of a research project, to ensure our products provide value.

---

#### **Seven Principles of Successful Return to Work**

Promoting effective return-to-work (RTW) practices in an accessible way is important for all who are involved in the process. In 2004, a team led by Scientist Dr. Renée-Louise Franche, had completed a systematic review on workplace-based RTW interventions. The review, which looked at both the quantitative and qualitative literature, yielded evidence for a number of approaches.

In 2006, KTE staff helped make these findings more accessible by developing the *Seven Principles of Successful Return to Work*. In collaboration with the Workplace Safety & Insurance Board’s RTW / Labour Market Re-Entry branch, they used the results of the systematic review, along with current research, to develop these principles.

The principles were designed to distill the research evidence into nuggets of information that people could remember. The successful RTW principles should be useful to a range of players in the field, including disability managers, employers, insurers and of course, workers, adds Jane Gibson, Director of KTE at the Institute.

The principles provide a starting point to engage organizations in a dialogue about return to work, as employers and other RTW parties can see how the principles apply to their setting, notes Dr. Franche. “The principles are related, and when more than one is in place, there is a synergy that strengthens the impact,” she says.

In brief, the seven principles involve: a workplace commitment to safety; an offer of modified work to the employee; a 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 about workplace demands between employers and health-care providers, with the worker’s consent.

---

#### **Future directions**

Where does the Institute go from here? The review panel’s report and recommendations will be an important part of IWH’s planning over the next five years. We will build on the strengths that panel members identified, such as protecting our role in training young researchers, our interdisciplinary approach and our knowledge transfer and exchange activities. We will work on developing metrics, which are ways to measure our progress and milestones, in research and KTE.

Also, we will develop a strategic plan for 2008 to 2012, consulting with Institute staff, key agencies and partners to prepare this plan. This plan will guide us over the next five years, as we follow our mission to conduct and share research with workers, labour, employers, clinicians and policy-makers to promote, protect and improve the health of working people.

Left: Renée-Louise Franche, Scientist



# The Year in Numbers

## Staff

Total staff: 97 (82 full-time; 15 part-time)

Adjunct scientists: 33

## Students

PhD students: 10

Post-doctoral students: 2

Master's students: 2

Completed PhDs: 2

## Projects

Active projects: 78

National/provincial project collaborations: 26

International project collaborations: 21

National/provincial policy advisory roles: 6

International policy advisory roles: 13

## Funding

Research grant funding: \$2.5 million

Workplace Safety & Insurance Board funding: \$4.86 million

## Presentations & Publications

Articles in peer-reviewed journals: 54

Completed systematic reviews on the effectiveness of prevention interventions: 10

Book chapters: 13

Books: 1

Memberships on scientific journal boards: 17

Editorships of scientific journals: 3

Presentations to conferences & professional groups: more than 100

# Auditors' Report

To the directors of Institute for Work & Health:

We have audited the balance sheet of Institute for Work & Health as at December 31, 2006 and the statements of operations, net assets and cash flow for the year then ended. These financial statements are the responsibility of the organization's management. 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 plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial

statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the organization as at December 31, 2006 and the results of its operations and cash flow for the year then ended in accordance with Canadian generally accepted accounting principles.

*Stern Cohen LLP*

Chartered Accountants  
Licensed Public Accountants  
Toronto, Canada  
March 16, 2007

## Statement of Operations

For the year ended December 31,	2006	2005
<b>Revenue</b>		
Workplace Safety and Insurance Board of Ontario	\$ 4,864,232	\$ 4,864,232
Other (Note 6a)	2,614,929	2,391,107
Interest	59,543	37,018
	<b>\$ 7,538,704</b>	<b>\$ 7,292,357</b>
<b>Expenses</b>		
Salaries and benefits	\$ 5,889,233	\$ 5,493,872
Travel	180,847	102,107
Supplies and service	132,583	124,072
Occupancy costs	534,737	521,468
Equipment and maintenance	129,657	106,604
Publication and mailing	86,719	59,708
Voice and data communications	44,822	34,243
Staff training	44,471	59,353
Outside consultants (Note 6b)	270,644	385,158
Other	130,541	108,993
Amortization of capital assets	170,333	226,058
Amortization of deferred rent	(45,264)	(45,264)
	<b>\$ 7,569,323</b>	<b>\$ 7,176,372</b>
Excess (deficiency) of revenue over expenses for the year	<b>\$ (30,619)</b>	<b>\$ 115,985</b>

See accompanying notes.

## Statement of Net Assets

For the year ended December 31,	2006		2005	
	Invested in capital assets	Unrestricted (Note 6c)	Total	Total
<b>Beginning of year</b>	<b>\$ 311,930</b>	<b>\$ 462,159</b>	<b>\$ 774,089</b>	<b>\$ 658,104</b>
Excess (deficiency) of revenue over expenses for the year	(170,333)	139,714	(30,619)	115,985
Investment in capital assets	55,871	(55,871)	-	-
<b>End of year</b>	<b>\$ 197,468</b>	<b>\$ 546,002</b>	<b>\$ 743,470</b>	<b>\$ 774,089</b>

See accompanying notes.

## Statement of Cash Flow

For the year ended December 31,	2006	2005
<b>Operating Activities</b>		
Excess (deficiency) of revenue over expenses for the year	\$ (30,619)	\$ 115,985
<b>Items not involving cash</b>		
Amortization of capital assets	170,333	226,058
Amortization of deferred rent	(45,264)	(45,264)
Deferred revenue	(187,798)	814,156
Working capital from (required by) operations	\$ (93,348)	\$ 1,110,935
Net change in non-cash working capital balances related to operations	(7,211)	(134,424)
Cash from (required by) operations	\$ (100,559)	\$ 976,511
<b>Investing Activities</b>		
Purchase of capital assets	\$ (55,871)	\$ (82,910)
Short-term investments	(115,383)	(323,069)
	(171,254)	(405,979)
<b>Change in cash during the year</b>	<b>(271,813)</b>	<b>570,532</b>
<b>Cash</b>		
Beginning of year	817,716	247,184
End of year	\$ 545,903	\$ 817,716

See accompanying notes.

## BALANCE SHEET

## Balance Sheet

For the year ended December 31,	2006	2005
<b>Assets</b>		
<b>Current assets</b>		
Cash	\$ 545,903	\$ 817,716
Short-term investments (Note 2)	1,047,011	931,628
Accounts receivable (Note 3)	681,120	428,099
Prepaid expenses and deposits	133,670	77,362
	<b>\$2,407,704</b>	<b>\$ 2,254,805</b>
Capital assets (Note 4)	197,468	311,930
	<b>\$2,605,172</b>	<b>\$ 2,566,735</b>
<b>Liabilities</b>		
<b>Current liabilities</b>		
Accounts payable	\$ 427,109	\$ 124,991
Deferred revenue (Note 5)	1,344,064	1,531,862
Current portion of deferred rent	45,264	45,264
	<b>1,816,437</b>	<b>1,702,117</b>
Deferred rent	45,265	90,529
	<b>\$1,861,702</b>	<b>\$ 1,792,646</b>
<b>Net Assets</b>		
Invested in capital assets	\$ 197,468	\$ 311,930
Unrestricted	546,002	462,159
	<b>743,470</b>	<b>774,089</b>
	<b>\$2,605,172</b>	<b>\$ 2,566,735</b>
Other information (Note 6) See accompanying notes.		
Approved on behalf of the Board:	 Director	 Director

Notes to Financial Statements  
December 31, 2006

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

The Institute is a knowledge based organization that strives to research and promote prevention of workplace disability, improved treatment, optimal recovery and safe return-to-work. The Institute is dedicated to research and the transfer of research results into practice in clinical, workplace and policy settings.

The Institute is predominantly funded by the Workplace Safety & Insurance Board of Ontario (WSIB) up to the Institute's approved WSIB budget. Other revenues are generated through research activities and certain interest earned.

**1. Significant Accounting Policies**

**(a) Amortization**

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

**(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 WSIB, 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.

**(c) Lease Inducements**

The lease inducements, consisting of cash, are deferred and amortized over the term of the lease.

**(d) Investments**

Short-term investments are carried at cost.

**2. Short-term Investments**

	2006	2005
GIC	\$ 400,859	\$ 400,859
Ontario Savings Bonds	384,906	530,769
Corporate note	261,246	–
	<u>\$1,047,011</u>	<u>\$ 931,628</u>
Estimated Fair Value	\$1,056,000	\$ 947,000

The GICs earn an average interest of 3.9% and mature in 2009 and 2010. The Ontario Savings Bonds yield an average interest of 4.75% and mature 2007 and 2008. The Corporate note earns interest of 5% and matures in 2007.

**3. Accounts Receivable**

	2006	2005
The Foundation for Research and Education in Work & Health Studies	\$ 158,297	\$ 53,646
Other	522,823	374,453
	<u>\$ 681,120</u>	<u>\$ 428,099</u>

#### 4. Capital Assets

Cost	Accumulated amortization	NET	
		2006	2005
Furniture and Fixtures			
\$ 591,099	\$ 526,361	\$ 64,738	\$ 108,969
Computer Equipment			
1,192,499	1,094,170	98,329	111,366
Leaseholds			
503,131	468,730	34,401	91,595
\$2,286,729	\$2,089,261	\$ 197,468	\$ 311,930

#### 5. Deferred Revenue

	2006	2005
OCA	\$ 36,081	\$ 75,335
NIOSH	13,446	35,536
CIHR	358,150	370,225
University of Maryland	22,921	66,225
WSIB-Contract	63,000	-
CAN	34,574	68,064
Pfizer	-	124,509
Worksafe BC	70,290	-
WDMB Special Project	80,000	-
MOHLTC	374,156	419,806
University of Saskatchewan	21,836	34,231
WSIB-RAC	214,054	191,701
Other	55,556	146,230
	\$1,344,064	\$ 1,531,862

#### 6. Other Information

##### (a) Other Revenue

	2006	2005
NIOSH	\$ 97,668	\$ 171,756
Pfizer	124,509	20,030
CIHR	538,412	466,472
OCA	42,554	68,511
SSHRF	11,287	26,667
Ontario Neurotrauma Fund	42,772	16,095
CAN	50,309	88,594
University of N.S.	-	72,000
CHSRF	1,035	34,305
Ontario Ministry of Health	583,920	206,033
WSIB-RAC	468,840	275,164

WSIB-Pilot	\$ 386,749	\$ 415,506
WSIB-Contract	-	378,691
University of Saskatchewan	49,245	32,539
University of Maryland	42,131	5,414
Worksafe BC	53,310	-
Other	122,188	113,530
	\$2,614,929	\$2,391,107

##### (b) Outside Consultants

	2006	2005
University co-investigators	\$ 144,521	\$ 54,690
Other project-related services	79,206	303,032
Other services	46,917	27,436
	\$ 270,644	\$ 385,158

##### (c) Unrestricted Net Assets

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

	2006	2005
Total assets	\$ 2,605,172	\$ 2,566,735
Invested in capital assets	(197,468)	(311,930)
	\$ 2,407,704	\$ 2,254,805
Liabilities	(1,861,702)	(1,792,646)
Unrestricted net assets	\$ 546,002	\$ 462,159

##### (d) Commitments

The Institute is committed under a lease for premises which expires July 31, 2009 with annual rents, exclusive of operating costs, as follows:

YEAR	AMOUNT
2007	\$ 200,000
2008	\$ 200,000
2009	\$ 116,000

##### (e) Pension

For those employees of the Institute who are members of the Hospitals of Ontario Pension Plan, a multi-employer defined benefit pension plan, the Institute made \$286,063 contributions to the Plan during the year (2005 - \$268,402).

##### (f) Financial instruments

The organization's financial instruments consist of cash, short-term investments, accounts receivable, and accounts payable. It is management's opinion that the organization is not exposed to significant interest, currency or credit risks arising from these financial instruments and the fair value of these financial instruments is approximated by their carrying value.

## Board of Directors

### CHAIR

**Roland Hosein**  
Vice-President  
Environment, Health & Safety  
*GE Canada*

### DIRECTORS

**Ian Anderson**  
Vice-Chair  
*Ontario Labour Relations Board*

**Lesley Bell**  
Chief Executive Officer  
*Ontario Nurses' Association*

**Peter George**  
President & Vice-Chancellor  
*McMaster University*

**Clyde Hertzman**  
Canada Research Chair Tier 1  
Professor, Department of Health Care  
and Epidemiology  
*University of British Columbia*

**Steve Mahoney**  
Chair  
*Workplace Safety & Insurance Board*

**Rosemary McCarney**  
President & CEO  
*Plan International Canada*

**Daniel McCarthy**  
Canadian Director of Research and  
Special Programs  
*United Brotherhood of Carpenters  
and Joiners of America*

**Moira McIntyre**  
Vice President, Strategic Communications  
Policy and Research Division  
*Workplace Safety & Insurance Board*

**Cameron Mustard**  
President & Senior Scientist  
*Institute for Work & Health*

**John O'Grady**  
Labour Market Consultant

**Carolyn Tuohy**  
Professor of Political Science  
*University of Toronto*

## Scientific Advisory Committee

### CHAIR

#### **Clyde Hertzman**

Canada Research Chair Tier 1  
Professor, Department of Health Care  
and Epidemiology  
*University of British Columbia*  
Canada

### COMMITTEE MEMBERS

#### **Lex Bouter**

Vice Chancellor  
*Vrije University and Windesheim*  
The Netherlands

#### **John Burton**

Professor Emeritus  
*School of Management and Labour  
Relations*  
*Rutgers University*  
U.S.A.

#### **Walter Eichendorf**

Deputy Director General  
*German Federation of Institutions  
for Statutory Accident Insurance  
and Prevention*  
Germany

#### **Jody Heymann**

Canada Research Chair Tier 1  
*Institute for Health and Social Policy*  
*McGill University*  
Canada

#### **Sherine Gabriel**

Chair  
Department of Health Sciences Research  
*Mayo Clinic*  
U.S.A.

#### **Jeffrey Katz**

Co-Director  
Brigham Spine Center  
*Brigham and Women's Hospital*  
U.S.A.

#### **Graham Lowe**

President  
*The Graham Lowe Group Inc.*  
Canada

#### **Jean-Yves Savoie**

Chair, Research Advisory Council  
*Workplace Safety & Insurance Board*  
Canada

#### **Barbara Silverstein**

Research Director  
*Safety and Health Assessment and  
Research for Prevention (SHARP) Program*  
*Washington State Department of  
Labor & Industries*  
U.S.A.

### Knowledge Transfer & Exchange Advisory Committee

### CHAIR

#### **Sonya Corkum**

Knowledge Transfer Consultant

### COMMITTEE MEMBERS

#### **Andrea Addario**

Communications and labour expert  
*Canadian Union of Public Employees*

#### **David Clements**

Acting Director, Knowledge Transfer  
and Exchange  
*Canadian Health Services Research  
Foundation (CHSRF)*

#### **Judy Geary**

Vice-President, Program Development  
*Workplace Safety & Insurance Board*

#### **Susan Jaglal**

Toronto Rehabilitation Institute Chair  
Associate Professor, Department of  
Physical Therapy  
*University of Toronto*

#### **Liz Scott**

Principal  
*Organizational Solutions*

## Five-year Review Panel members

### CHAIR

#### **Ralph McGinn**

Former President and  
Chief Executive Officer  
*WorkSafe BC*  
Canada

### PANEL MEMBERS

#### **Walter Eichendorf**

Deputy Director General  
*German Federation of Institutions  
for Statutory Accident Insurance  
and Prevention*  
Germany

#### **Gary Franklin**

Medical Director  
*Washington State Department  
of Labor and Industries*  
U.S.A.

#### **Linda Nkemdirim**

Manager of Occupational Health Services  
*Canadian Pacific Railway*  
Canada

#### **David Robertson**

Director of Work Organization and  
Training  
*Canadian Auto Workers*  
Canada

#### **Emily Spieler**

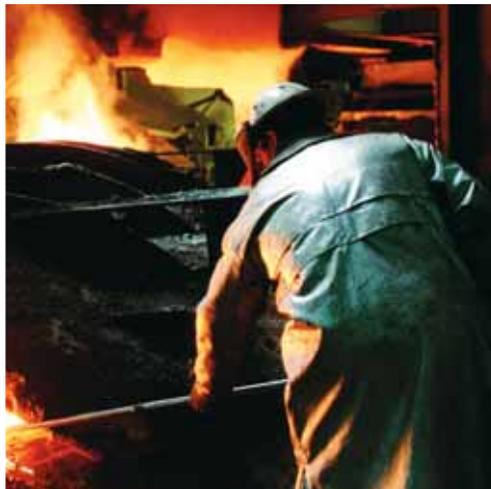
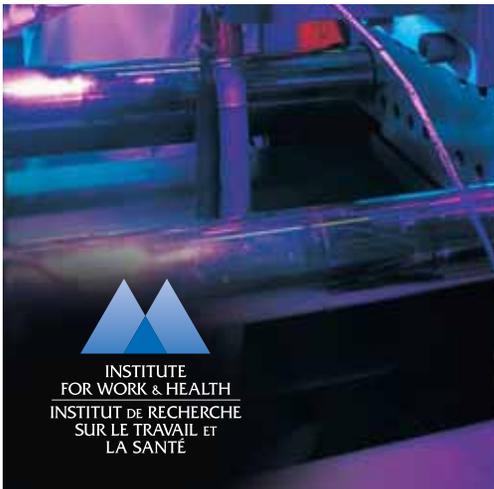
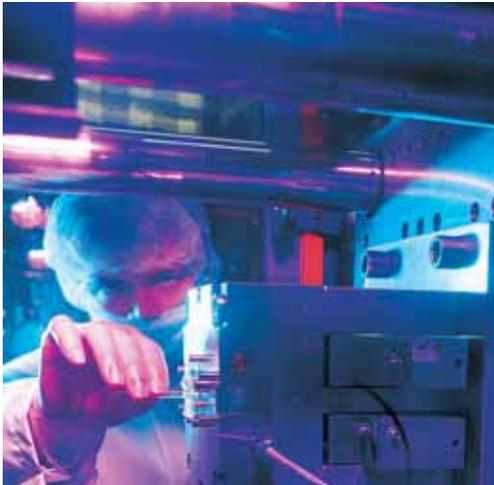
Dean of the School of Law  
*Northeastern University*  
U.S.A.

#### **Timothy Walker**

Scientist and engineer  
former Director General of the  
Health & Safety Executive  
*Great Britain*



Institute for Work & Health  
481 University Avenue, Suite 800  
Toronto, Ontario M5G 2E9  
T: 416.927.2027 F: 416.927.4167  
E: info@iwh.on.ca  
  
[www.iwh.on.ca](http://www.iwh.on.ca)



INSTITUTE  
FOR WORK & HEALTH  
INSTITUT DE RECHERCHE  
SUR LE TRAVAIL ET  
LA SANTÉ