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at work

Information on workplace research from the Institute for Work & Health

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

Research Excellence Advancing Employee Health

Research and business partnerships make sense

There is a solid case for investing in health and safety and for research and business to work together to prevent workplace illness and injury.

"The Institute has shown us that partnerships in workplace health and safety are essential. It's not easy, but it's well worth the effort," says Karen Hanna.

Hanna is Vice-President of Human Resource Strategy at Torstar Corporation and served as a member of the Institute's Five-year Review Panel. She was guest speaker at the Institute's Annual General Meeting on September 23, which was attended by more than 85 health and safety stakeholders.

Karen Hanna of Torstar Corporation was guest speaker at the Institute's Annual General Meeting

Although most businesses are committed to workplace illness and injury prevention, Hanna says they cannot have tunnel vision. "Four myths" need to be dispelled to pave the way for partnerships in prevention efforts.

Myth #1: Research takes too long and business needs answers yesterday. Getting results over time ensures that solid evidence is built over time. However, when short-term answers are needed, a literature review may be sufficient. Alternatively, researchers may provide a mid-term update throughout long-term studies.

Myth #2: Research and development in work and health is a large investment with little bottom-line impact. About $1.50 per WSIB-insured worker per year is invested in the Institute. "I consider this a wise investment," Hanna says.

Myth #3: Research solutions are not practical and cost too much money. WSIB statistics indicate the average lost-time injury in Ontario costs $59,000. Of that, $12,000 is direct workers' compensation cost and the rest are indirect costs. "Business depends on skilled, healthy workers. An investment in workplace health and safety can lead to lower costs and increased capability."

The fourth myth, says Hanna, is that researchers speak a different language. Making the research understandable, clear and ring true for all parties who can benefit from it makes sense. "The Institute has made strides in this area by choosing research transfer as a core business. It is among leaders in Canada in this regard," Hanna says.

Dispelling these myths are positive first steps to improve the use of research to prevent workplace illness and injury.

As a member of the Five-year Review Panel, Hanna says she listened to more

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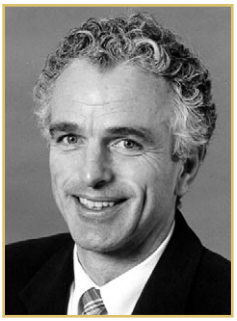
The Institute for Work & Health is an independent, not-for-profit organization whose mission is to research and promote new ways to prevent workplace disability, improve treatment, and optimize recovery and safe return to work.

Institute News

New Institute president appointed



Dr. Cameron Mustard

Dr. Cameron Mustard is the Institute's new President and Scientific Director.

Dr. Lorna Marsden, on behalf of the Institute for Work & Health's Board of Directors, announced the appointment at the Institute's Annual General Meeting.

"We're very pleased that Dr. Mustard has accepted this position and look forward to working with him," says Dr. Marsden. "The Institute has recently undergone a stringent review process and we are confident that Dr. Mustard will provide inspired leadership and lead new growth opportunities for the Institute."

Dr. Mustard joined the Institute as Scientific Director in 1999 and has led the development of the Institute's research agenda over the past three years. In addition to his Scientific Director role, he has served as IWH Interim President since July 1, 2002. He assumes the dual roles of President and Scientific Director effective immediately. Previously, Dr. Mustard was a member of the Manitoba Centre for Health Policy and Evaluation at the University of Manitoba.

He is a Professor in the Department of Public Health Sciences, Faculty of Medicine, University of Toronto, Associate Director of the Population Health Program of The Canadian Institute for Advanced Research and is an Institute Advisory Board Member of the Canadian Institutes of Health Research's Institute of Aboriginal Peoples' Health.

A specialist in the area of population health, he is the recipient of numerous competitive awards and grants, including a CIHR Investigator Award (1998-2003).

Institute board of director changes include new board chair

The Institute's Board of Directors comprises volunteers made up of business, labour, clinical and health and safety leaders. Several changes to the Board were made at the last meeting.

• Dr. Mark Rochon, President and CEO of Toronto Rehabilitation Institute, is the Institute's newly-appointed Board Chair for a two-year term. He takes over from Dr. Lorna Marsden, President and Vice Chancellor of York University, who served as Chair for the past three years. Dr. Marsden will continue to serve as a Board Director.

• Ms. Marilyn Knox, President of Nutrition at Nestlé Canada Inc., retired from the Board. She served in the role of Vice-Chair for the past four years.

• Dr. S. Leonard Syme, past Chair of the Institute's Scientific Advisory Committee (SAC), also stepped down. The new SAC Chair, Dr. Clyde Hertzman, a Professor in the Department of Health Care and Epidemiology at University of British Columbia, joined the Board.

• Mr. Ron Hikel, Chair of the Ontario Workplace Safety & Insurance Board, will serve as Board Director. He takes the place of Mr. Glen Wright, who is on a leave of absence from the WSIB to serve as Chair of Hydro One.

Research and business partnerships make sense (continued from page 1)

than 40 hours of presentations from health and safety stakeholders. She "came away supporting the observation of one of my review colleagues. He said that the Institute is a jewel, and I agree. As we work together to make Ontario workplaces healthy and safe, we are fortunate to have this jewel in our midst."

This article is based on Karen Hanna's presentation at the Institute's Annual General Meeting.

Toward best practices in knowledge transfer: how are Canadian research organizations doing?

The results of a recent study, led by Institute Scientist Dr. John Lavis who holds the Canada Research Chair in Knowledge Transfer and Uptake at McMaster University, has shown that Canadian applied research organizations are well on their way to following "evidence-based principles" in transferring new research knowledge to decision-makers. But there are still opportunities for improvement.

The evidence-based principles incorporate the following elements:

- What should be transferred? (the message)
- To whom should it be transferred and with what investments in targeting them? (the target audience)
- By whom should it be transferred and with what investments in supporting them? (the messenger)
- How should it be transferred? (type of process and supporting communications infrastructure)
- With what effect? (evaluation of impact)

The research team surveyed 171 directors of applied research organizations in Canada about their knowledge-transfer practices. Half of the research organizations were in the health sector, the other half in the economic/social sector.

About one-third of the research organizations have moved beyond transferring project reports to transferring actionable messages, based on a body of research knowledge, to their target audiences. Many research organizations tailor their knowledge-transfer approach to their target audiences but only some dedicate resources to getting to know them or building their knowledge-uptake skills. Even fewer research organizations dedicate resources to enhancing their internal capacity for knowledge transfer through skill building among their research and knowledge-transfer staff. Almost all of the research organizations supplement their interactive knowledge-transfer processes with web sites. Only a small proportion of organizations perform any type of evaluation related to their knowledge-transfer activities.

The good news is that Canadian research organizations quite often report transferring research knowledge in ways that are consistent with the evolving evidence about what knowledge-transfer approaches work. However, there is room for improvement in developing actionable messages for decision-makers, developing knowledge-uptake skills among target audiences and knowledge-transfer skills within research organizations, and in evaluating the impact of knowledge-transfer activities that are undertaken.

New department name emphasizes two-way communication

Knowledge Transfer & Exchange (KTE) is the new name of the Institute's department formerly known as Research Transfer.

"This change underscores the importance of knowledge transfer being a two-way process of communication and learning between the Institute and its target audiences," says Director of KTE Jane Brenneman Gibson. The exchange component encourages feedback from those target audiences on the usefulness and ease of the application of the new knowledge and areas of interest for future research, says Gibson.

Research Transfer was established in 1999 as an Institute core business. It was set up to ensure that the Institute's research information and resulting knowledge is made available and accessible to stakeholders including clinicians, workplaces and policy-makers.

CHIROPRACTOR ENJOYS COMBINING PRACTICE AND RESEARCH

Dr. Carlo Ammendolia

PhD student Dr. Carlo Ammendolia, DC, who just completed his 20th year in private chiropractic practice, says that he "loves the combination" of both the clinical and research aspects of his job.

Ammendolia is currently working on several projects at the Institute. He is leading a systematic review examining the effectiveness of back belt use for the primary prevention of occupational low-back pain and hopes to publish the study's findings in the coming months.

The Ontario Chiropractic Association and the Ontario Ministry of Health and Long-Term Care recently awarded Ammendolia funding to support his PhD project, an extension of his master's thesis work. He is currently finalizing the protocol for his PhD work at the University of Toronto's Institute of Medical Sciences. In the long term, he hopes to develop a decision-aid tool for chiropractors for the treatment of patients with acute low-back pain.

His master's thesis involved an assessment of a chiropractic community's rate of X-ray use for patients with acute low-back pain. It was followed by a six-month community-based educational intervention with the practitioners. After the educational intervention, the community's high rate of X-ray use decreased to a rate that's more consistent with current evidence-based guidelines.

Ammendolia, who also received a three-year competitive training grant from the Canadian Institutes of Health Research (CIHR) in partnership with the Canadian Memorial Chiropractic College, says his relationship with IWH is motivating. "The Institute's environment and its researchers are a wonderful resource. I have benefited tremendously from getting direction and feedback from the many experts," he says.

Ammendolia wrote Institute Occasional Paper #7, The use of back belts for prevention of occupational low-back injuries. To order this paper, contact Administrative Assistant Hanh Ramond by e-mail at hramond@iwh.on.ca or by phone at: (416) 927-2027 ext. 2173.

THE MESSAGE ON MASSAGE THERAPY

Massage therapy is becoming a more common treatment for patients with low-back pain – but does it work?

According to a literature review conducted by IWH-based members of the Cochrane Collaboration Back Review Group, massage therapy can relieve symptoms and improve function for patients with low-back pain.

Patients who have subacute (pain lasting between four and 12 weeks) and chronic low-back pain (pain lasting longer than 12 weeks) can benefit from massage therapy, especially if it's combined with exercise and education and if it's delivered by a licensed massage therapist.

The benefits of massage can also last for at least one year after the end of treatment for patients with chronic low-back pain.

The results of this study are published in the September 1, 2002 edition of *Spine*.

About 10 per cent of those who suffer from low-back pain have chronic pain. Eighty to 90 per cent of the health-care costs associated with back pain are for those patients with chronic low-back pain and disability.

Visit the Cochrane Back Review web site at www.cochrane.iwh.on.ca for more information.

Upcoming plenary at the Institute

An important component of the Institute's research program is the presentation of plenary sessions, which are open to external attendees. Plenaries scheduled for the fall include:

Tuesday, November 12: Return to Work (RTW) in Small Workplaces: A Sociological Account.

This presentation reports on findings from an empirical study of the discourse, policy and practice of RTW in Ontario and how it plays out within the social ecology of small enterprises.

Presenter: Dr. Joan Eakin, Associate Professor, Department of Public Health Sciences, Faculty of Medicine, University of Toronto.

To confirm your attendance, contact Administrative Assistant Elizabeth Resendes by e-mail at eresendes@iwh.on.ca. Seating is limited. For more information, visit the IWH web site: www.iwh.on.ca.

Study to evaluate the impact of a new model of nursing care

Recent nursing policy and research papers have linked nurse practice environments with poor nurse health and low job satisfaction. They have also suggested a potential relationship between work stress and a deteriorated quality of patient care. Some studies indicate problems in organizational culture and safety climate can be linked with a lack of clear policies and procedures.

A new model of nursing care being implemented by three recently merged hospitals in Ottawa may have a positive impact on these issues. A research study, led by Institute Scientist Dr. Michael Kerr, together with co-investigators from The Ottawa Hospital, the Universities of Western Ontario and Toronto and The Change Foundation, is going to take advantage of this "natural experiment" to evaluate the change process.

When the hospitals in the Ottawa area merged to create The Ottawa Hospital (TOH), each had its own model or models of nursing care delivery that affected communication and decision-making about patient care. Given the new consolidated organization, a single systems-wide model of nursing care was created by clinical nurses, educators, managers and patients after an extensive literature review, consultation, and analysis conducted by the nursing professional practice team. The new model's concept of direct care prioritizes autonomy and accountability for nursing care for a selected group of patients. Its concept of support systems prioritizes educational support, clinical expertise, and organizational day-to-day support. Evaluation of the implementation of this model is a priority.

It is thought that this new model of practice will have a direct impact on the way in which nurses perform their daily roles, and that this may have an impact on nurses' well-being, the organizational climate of their unit, and ultimately the quality of patient care.

The three-year study of the change process, funded by the Canadian Health Services Research Foundation (CHSRF), will evaluate how the new model affects the delivery of nursing care, and its impact on three levels–nurses, units, and corporate. The study will involve three surveys at one-year intervals that will examine indicators of work stress, nurse well-being, organizational climate, and quality of patient care. It will also evaluate individual nurse's perceptions of the fairness of the implementation process and acceptance of the new model. Qualitative interviews will be conducted at the same time as the surveys to gain insight into the overall context of the study and its possible impact on non-nursing staff.

Medical radiation technologists at risk for burnout

A recent survey of medical radiation technologists (MRTs) and a comparison group of physiotherapists (PTs) has indicated that MRTs report worse working conditions and worse health indicators than PTs. This may be contributing to this group's high rate of "burnout."

A study, led by Institute Scientist Dr. Michael Kerr, has found a correlation between health, working conditions and burnout. Compared to the physiotherapists, the MRTs were a bit older and reported poorer overall health. They also reported doing more shiftwork, working longer hours, having higher job demands, lower social support, and lower control over work-related decisions.

This study, looking at workplace risk factors for burnout, was part of a larger study that examined risk factors for occupational asthma and respiratory symptoms, funded by the WSIB Research Advisory Council. The main study, led by Dr. Gary Liss of the University of Toronto's Gage Occupational and Environmental Health Unit, was one of the largest population-based surveys among MRTs (1,110) and PTs (1,523). The MRT workforce is substantial, with more than 10,000 in the whole of Canada (including about 5,000 in Ontario alone), and an estimated hundreds of thousands more in Europe and the United States.

MRTs can be at an increased risk for occupational asthma, respiratory symptoms, and a poorly characterized condition called "darkroom disease." This group is exposed to chemicals, which can act as respiratory irritants and/or sensitizers. Their working environment includes problems with ventilation, leaking processors, and film jams.

But, as this study now shows, they are also exposed to workplace organizational factors that may be contributing to a high rate of burnout. The study used a new scale for burnout that asked questions such as: "Do you find work emotionally exhausting?" and "Do you feel worn out at the end of your working day?"

"Work environment factors, especially job strain and physical demands, appear to be strongly associated with work burnout in these workers," says Kerr. "This relationship was still evident even when self-reported mental and physical health status were taken into consideration."

Policy-Makers

Trend toward contingent work arrangements may affect health

Since the 1970s, more and more people have been working part time, under short-term contract, as freelancers or in other "non-standard" working arrangements. Also known as contingent work, some reports indicate that the number of contingent workers comprises more than one-third of the employed labour force in Canada.

"Globalization and technological advancements have made the traditional employee-employer relationship, with its full-time, onsite job with benefits a thing of the past. Market forces have caused employers to look for ways to cut costs, and using contingent workers is one way to achieve this," says Dr. Emile Tompa, Institute Scientist.

Some employers are choosing to increase the demands on their core employees and contract out the more marginal tasks to contingent workers. While this shift may lead to increasing productivity and lower labour costs in the short term, Tompa says it may be coming at a price—the health of contingent workers. It's a question he hopes to answer in a large study of the relationship between contingent work and health now under way at the Institute and funded by the Canadian Institutes of Health Research.

"We do know there is a link between job insecurity and health," says Tompa. "Since insecurity is an underlying issue in contingent work arrangements, it is one of the factors we would like to better understand through our study."

Contingent work arrangements also raise concerns about training and hazard surveillance, he adds. Do part-time and contract workers receive adequate training? Do those working freelance follow proper health and safety precautions? Because these employees are not full-time they may be at a higher risk of injury or hazardous exposures arising from their lack of experience in their work environment.

Using two national databases, Tompa's project will explore whether contingent workers have poorer health than their counterparts in full-time positions. The project will also try to determine if there is a greater impact on health among those individuals who are more frequently in contingent work arrangements or in them for longer periods of time. The influence of social assistance programs, unemployment rates, social support and family on the relationship between contingent work and health will also be studied.

Tompa's research will incorporate perspectives on non-traditional work arrangements that have been developed by an innovative Community-University Research Alliance (CURA). It is based at York University and is supported by the Social Sciences and Humanities Research Council. The Institute has been collaborating with this research team since its founding in 2001. The CURA is led by Dr. Leah Vosko who holds a Tier II Canada Research Chair at York University and is an Adjunct Scientist with the Institute.

Web Site Update

Three major Institute reports now online

Three new documents on the IWH web site will provide readers with an indepth look at the Institute's activities.

The Institute for Work & Health 1990-2001: An Overview is a summary of the Institute's submission to the International Five-year Review Panel (see *At Work*, December, 2001).

Available in portable document format (PDF), the 20-page overview describes the Institute's history, operations and research and knowledge-transfer initiatives over the past five years. The report from the Panel and the Institute's response will be posted in late December or early January.

Report on 2001: Institute for Work & Health Research Projects and Research Transfer is the second major document now available at www.iwh.on.ca. The document is a comprehensive catalogue of research and knowledge-transfer projects and is produced annually by Institute staff.

Finally, the **2001 annual report**, released at September's Annual General Meeting, is the third report recently linked on the home page. ***Building Healthier Workplaces*** highlights the Institute's research themes and projects, knowledge-transfer initiatives, and contains IWH financial information.

To access any of these documents online, go to www.iwh.on.ca. Questions or comments about the web site may be directed to Communications Associate Katherine Russo at krusso@iwh.on.ca.

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