# at weirk

Information on workplace research from the Institute for Work & Health

## This Issue

## For Clinicians

Several factors may impact on whiplash recovery

Strong participation at ADAC conference

## For Workplace

Taking research to the workplace

How safety climate can predict injury rates



Equal risk for equal work

Laying the groundwork for population health research on disability

## For Researchers

Institute scholarship awarded to students with an interest in work and health

Institute collaborates with CIHI on latest report

## **This Issue's Supplement**

Understanding the chiropractic experience in successful return to work

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Research Excellence Advancing Employee Health

## New Institute President Takes the Helm January 1, 2002

r. Stephen Bornstein, PhD, says that when he heard about the vacant president's position at the Institute, it didn't take him long to "...become very interested, very quickly."

"The Institute has an outstanding reputation in the specialized scholarly and policymaking communities as the country's leading independent workplace health and safety research unit," he says. "The opportunity to be involved with this prestigious organiza-

tion and its excellent record of research was hard to resist."

Dr. Bornstein comes to the Institute from the Newfoundland and Labrador Centre for Applied Health Research (NLC-AHR) where he has been Director since it was established in 1999. In this position, he was responsible for overseeing the launch and development of NLCAHR's research program, leading the Centre in the development of several key partnerships, and assisting researchers to expand their access to funding opportunities.

Although he says that he, "...feels real pangs of regret at the prospect of leaving Newfoundland and the companionship of so many delightful and impressive colleagues and collaborators," he hopes to maintain a long-distance relationship by developing a possible partnership between the Institute and the NLCAHR.

Officially slated to take the presidency on Jan. 1, 2002, Dr. Bornstein says that

among his first tasks are meetings and discussions with Institute researchers, staff and stakeholders who know the Institute and who know the needs of

> Ontario workplaces to find out what they feel ought to be done, what's working well and what might benefit from change.

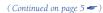
> "What I find most appealing is the opportunity to have some real leverage over the country's workplace health and safety agenda, not only in terms of what research gets done but

also, through effective transfer and communications, in terms of what actually happens in the workplaces," he says.

Dr. Bornstein sees the Institute's primary strength as the "quality, energy, prestige and productivity of its researchers, both at the senior level and among the younger members of the team." He is impressed by the "collegial internal culture that encourages and rewards free, supportive, but honestly critical, discussion of ongoing work and emerging ideas." He also cited the close yet autonomous relationship with its main funder, the Workplace Safety & Insurance Board.

By continuing to enhance and develop the Institute's current strengths, Dr. Bornstein says he hopes to make the Institute a more influential and betterfunded organization.

"Health issues are at the forefront of the national political and policy agendas and at the top of the public's list of con-





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.

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## Research

## INSTITUTE SCHOLARSHIP AWARDED TO STUDENTS WITH AN INTEREST IN WORK AND HEALTH

or the past two years, the Institute has provided a graduate fellowship to a student who has academic excellence and who is studying in the area of work and health.

Rebecca Meyer is this year's recipient. She's in her final year at the University of Toronto and is working towards a Master's degree in Occupational and Environmental Health.

"With the rising costs of postsecondary education it's not always possible for some to continue their education. This fund provides students the opportunity to expand their horizons and contribute to the well-being of today's workforce," Meyer says.

This scholarship was established by the Institute and is administered by the University of Toronto.

"We're very interested in supporting students who have a genuine interest in work and health issues," says Institute Scientific Director Cameron Mustard. "We're pleased to support graduate education training in professional and research disciplines."

Meyer says that she would like to complete her Registered Occupational Hygienist certification and work in the private sector as an occupational hygienist or health safety specialist. "Health in the workplace is becoming a big issue in today's society and the need for on-site professionals to promote and maintain a healthy workplace is of great importance," she said.

The scholarship's first recipient, Starly Catli, is also completing a Master's of Health Science in Occupational and Environmental Health at the University of Toronto. In the long-term, Catli says she hopes to "...make significant, positive contributions to improving the health and safety of the workplace through workplace controls implementation as well as policy-making.

## WEB SITE UPDATE

www.iwh.on.ca

Below are some frequently asked questions about our web site. We hope you will find this information useful.

## Q. What is the Gateway?

A. The gateway is another word for our search page. It's represented on the site by the green arrow icon. When you visit this page, you have the option of searching the Institute's site one of three ways: by keyword, by audience type, or by headline.

## Q. How do I let you know what I think of the site?

A. A user survey is on the bottom of each page in the footer. Simply click on the *web user survey* link and it will bring you to an online list of questions. To contact the communications associate directly, send an e-mail to <a href="klukewich@iwh.on.ca">klukewich@iwh.on.ca</a>. With your feedback, we hope to continue to build and develop content to better reflect what you're interested in seeing when you visit our site.

## Q. I would like to receive an electronic copy of the newsletter. How do I sign up?

A. The full text of both the *At Work* and *Infocus* newsletters, as well as our other publications such as *Linkages*, are available on the site. If you wish to receive an e-mail notification rather than a hard copy, please send an e-mail to the editor at: atwork@iwh.on.ca

Questions or comments about the site may be directed to Communications Associate Katherine Lukewich at klukewich@iwh.on.ca.



## Workplace

## HOW SAFETY CLIMATE CAN PREDICT INJURY RATES

If someone has not been in hospital for the last five years, does that mean they are healthy? Not necessarily. In the same way, if a company has not had a serious injury in the last year, does that mean that the company is safe? No, not necessarily, says Dov Zohar, the Institute's visiting scientist this past fall.



Dov Zohar

The Institute hosted Zohar from the Technion, the Israeli Institute of Technology. He made a number of presentations to Institute staff and external stakeholders on his work on safety climate. Safety climate

measures the shared perceptions held by workers in an organization or a department with regard to safety policies, procedures, and practices. It measures the importance that companies give to safety in comparison with productivity or quality. In recent years, he has developed his theory on safety climate and conducted multiple intervention studies in the manufacturing sector, the health-care sector, and the Israeli army.

There may be conditions that are latent for potential injuries, Zohar says, but it is often difficult to predict potential workplace hazards if what is measured are only trailing indicators such as lost-time injuries and absenteeism rates. He suggested workplace safety climate is a leading indicator that can flag problems.

A company can get a reading of their safety climate in a number of ways. Workers are surveyed to obtain their perceptions of the importance of safety. An objective measure of safety climate is obtained through observing safety behavior. Safety climate is also determined by noting how safety is prioritized, especially during times when there are production pressures, he says.

One of the most important uses of measuring safety climate is to highlight the difference that often exists between the formal policies on safety and the practices that supervisors and managers enforce, Zohar says. Safety climate is what managers and supervisors actually do, rather than what is written in policies and procedures. It measures safety behavior, especially when there is a conflict with time, effort or money.

Zohar's intervention research has demonstrated that when supervisors and managers get feedback on how their practices affect the perception of workers, there is a pronounced improvement in safety practices and injury outcomes. When supervisors focus on worker safety behavior, this changes workers' perceptions on how safety is prioritized, and this leads to changes in their behavior – and hence decreased injury rates.

## TAKING RESEARCH TO THE WORKPLACE

There can be a wide chasm between research and what actually happens on the shop floor. These two communities work within different time frames, have different priorities, make decisions independently of each other, and speak different languages. Yet it is increasingly urgent for research knowledge to be transferred to the workplace.

This year, Institute Research Transfer Associate Dee Kramer took two key messages, based on bodies of research on how to prevent injuries, to three manufacturing companies. She engaged the companies in an intensive, lengthy process of exchange and collaboration that created research transfer links between the companies and the Institute.

Over six months she visited each plant 10 times. Key managers and union members spent personal time with her reviewing the research, thinking over how it could impact their own work and

their leadership. She got involved in company meetings, especially those on health and safety. Also, scientists from the Institute participated in workshops with the workplaces. Kramer also facilitated discussion groups with managers and members of the Joint Health and Safety Committees (JHSC) on the key messages. The groups explored ways the research could help the company with their specific problems and issues.

As the Institute is just beginning to understand how to effectively transfer research knowledge, evaluation was important. The project was evaluated using qualitative methods of data collection including participant observation, and review of company documents.

Changes occurred in all three companies. The research findings gave the companies the opportunity to think out of the box, and re-examine and envision new solutions to issues of productivity,



efficiency, and quality through the new lens of worker safety and employee health.

For example, a bonus scheme previously based on zero lost-time injuries was changed to be more team-focused. A plant manager and union president began daily safety walkabouts. This not only raised safety awareness on the shop floor, but it also created a more conducive relationship between management and labour.

Kramer began her interventions with five key principles that guide the Institute's



## **Policy Makers**

## **EQUAL RISK FOR EQUAL WORK**

ew research under way at the Institute shows that men and women have an equal risk of work-related injury when they're doing the same job.

Despite there being nearly equal numbers of men and women in the Ontario labour force, men have a higher overall rate of work-related injuries. The difference between genders is especially apparent when looking at industry-based injury rates. But the picture changes, says Institute Scientist Jennifer Payne, when you compare men and women working in the same occupation.

"For example, when comparing men and women in the construction industry,

men have a much higher rate of injury," she says. "However, when you compare men and women in the same construction occupation, their rates of injury are very similar."

The reason men appear to have higher rates of injury overall seems to be linked to the type of work that men do. There tends to be more men in higherrisk occupations such as machining, processing and heavy equipment operation, whereas women are more likely to work in administrative and health-care occupations

The study, which will be published in a report on women's health, involved

innovative data methodologies to analyze both lost-time claims from the Workplace Safety and Insurance Board, as well results from the Labour Force Survey.

The findings have implications for both decision-makers and researchers. "Our findings suggest that gender is not a good marker for risk, but that the occupation or the tasks that comprise the occupation, are best able to identify those at risk of work-related injuries, which could assist in better targeting health and safety programs and policy," says Payne.

## LAYING THE GROUNDWORK FOR POPULATION HEALTH RESEARCH ON DISABILITY

nstitute research on disability has identified opportunities that may assist other researchers working in the disability field.

Emile Tompa, Associate Scientist, has been looking into two theoretical frameworks on disability — Nagi and the World Health Organization. These frameworks provide a set of concepts for classifying the impact of a health condition on a person's life. While there has been much research both critiquing and advancing these frameworks, little has been done to bridge the gap between theory and applied research.

"In order to build a population health research program on disability, we wanted to better understand how the concepts from disablement frameworks can be applied to the wealth of secondary data that has been collected in Canadian and international population health surveys," says Tompa.

To accomplish this, Tompa and his associates used the *International Classification of Functioning and Disability Beta-2 Draft (ICIDH-2)* to code health and health-related questions pertaining to disability in surveys such as the National Population Health Survey (NPHS) and Survey of Labour and Income Dynamics (SLID). They found that mapping the disablement concepts onto questions in these existing health



and labour-market surveys was quite challenging.

Through the exercise, Tompa and his team discovered strengths and weaknesses of the frameworks and the surveys' disability-related questions. They have developed a modified conceptual framework and suggested survey questions to address some of these issues. The work also resulted in a detailed picture of the "coverage" of the ICIDH-2 codes in a number of Canadian surveys.

"We think this research should provide a first step towards developing some synergy among researchers in this field," says Tompa. Discussions regarding this work and other disability data needs are currently under way with other scientists and organizations studying disability.

## Taking Research to the Workplace (continued from previous page)

knowledge transfer activities. They include: creating a compelling message based on rigorous research that is relevant to decision-makers; tailoring the message to the audience; establishing credibility; engaging interactively; and evaluating activities.

Her collaboration with the three companies reaffirmed these principles and enhanced the focus on the partnership between the Institute and the workplace. The need to build trust and credibility with many people in the workplace over an extended time period was key to building momentum. The time enables learning about the company's culture and safety climate to help identify specific issues, strategic initiatives, or policy initiatives in the company that the message can help inform.

## SEVERAL FACTORS MAY IMPACT ON WHIPLASH RECOVERY

The recovery of patients with whiplash injuries is influenced by a number of clinical factors as well as the type of automobile insurance system in place. This conclusion is based on a review of the literature by Institute Associate Scientist Dr. Pierre Côté, DC.

"We found evidence that clinical indicators such as older age, female gender, neck pain and headache intensity predict a longer recovery," says Dr. Côté. "The review suggests that the type of automobile insurance system also has an impact on recovery."

Evidence from the reviewed cohort studies suggests that patients with whiplash injuries covered by a less litigious insurance system, such as no-fault, may recover faster than those who are covered by a tort system.

"The difference in prognosis of patients with whiplash injuries between



the two types of automobile insurance systems suggest that compensating for pain and suffering may have a profound impact on the recovery and duration of whiplash claims," says Dr. Côté.

The results were published in the October 1, 2001 edition of Spine.

See this month's Infocus article which is based on Dr. Côté's research.

## STRONG PARTICIPATION AT ADAC CONFERENCE

number of Institute staff were invited speakers at the 2001 Association of Designated Assessment Centres (ADAC) conference which was themed, Evidence-based Practice and DACS – Putting Evidence into Practice.

The ADAC comprises organizations appointed by the Financial Services Commission of Ontario and make up a roster of designated assessment centres (DAC). These centres, which accept referrals from insurance companies that are unable to resolve disputes with claimants, conduct assessments and provide a neutral opinion about the disputed issue.

Institute presenters included:

• Chantelle Garritty, Cochrane

Coordinator, and Sherra Solway, Research Associate, who presented on the nature of evidence and evidencebased practice;

- Vicki Pennick, RN, Manager of Health Services, Research, Monitoring and Evaluation, who presented an overview of the evidence on the management of back pain;
- Rhoda Reardon, Research Transfer Associate, who conducted an interactive workshop on research knowledge transfer; and
- Carlo Ammendolia, DC, PhD Student, who presented an overview of the evidence on the management of neck pain and headache.

## New Institute President (continued from page 1)

cerns. This is, therefore, an ideal moment to seek to bring workplace health and safety issues into greater prominence both within the research community and within the public arena."

Visit the Institute's web site (www.iwh.on.ca) and click on "New President Appointed" located on the home page to find out more about Dr. Bornstein's appointment.

## Institute Collaborates with CIHI on Latest Report

The Institute played a significant role in the development of a chapter in Canada's Health Care Providers, the latest report published by the Canadian Institute for Health Information (CIHI). The chapter, "The Health of Health Care Workers," provides a synthesis of current research on the health and health issues facing frontline health care workers.

Both the nature of the health care environment and the jobs within it, expose health care workers to specific health issues. The chapter highlights that health care workers are more likely to miss work because of illness and disability than those in other sectors. They are particularly susceptible to musculoskeletal injuries from moving and lifting patients, and are at risk of other jobspecific injuries and hazards ranging from needlestick injuries to HIV exposure to dealing with workplace abuse.

Stress and job strain are other important issues in the health care sector, however, the report shows there is a gradient across job types. Physicians experience the least amount of stress while nursing aides, orderlies, and attendants experience the most. Changes and restructuring within the health care system have also had an impact on health care workers' health. Some research points to increased burnout, depression and anxiety.

The Institute team included Dee Kramer, Kathy Knowles Chapeskie, Mieke Koehoorn, Mickey Kerr and Jane Bartram.

The report was released November 26th and is available on the CIHI web site (www.cihi.ca).



## **Institute News**

## ROBERT ELGIE TO CHAIR INSTITUTE'S REVIEW PANEL

Dr. Robert Elgie has accepted the invitation of the Board of Directors of the Institute for Work & Health to serve as Chair of its Five-Year Review panel.

Now in its tenth year of active operations, the Institute's Board of Directors commissioned this external review of its research and research transfer programs, the second such review since the Institute was created. Board Chair Dr. Lorna Marsden said she was particularly pleased that Dr. Elgie, given his long association with work and health issues, had accepted their invitation to oversee

this important undertaking.

Dr. Elgie will work with a panel to assess the quality and productivity of both the Institute's research and research transfer programs and their impact at the provincial, national and international level. The panel will also provide advice on priorities for research and research transfer for the next five years.

Confirmed panel members to date are: Steven Linton, a medical psychologist with the Swedish Institute for Working Life, Walter Eichendorf, President, German Work Insurance Fund, Daniel McCarthy, Canadian Director of Research and Special Programs, United Brotherhood of Carpenters and Joiners of America and Lynn McIntyre, Dean, Faculty of Health Professions, Dalhousie University.

The panel is expected to visit the Institute in March 2002 to review documentation and meet with staff, members of the Institute's Board and Research Advisory Committee, as well as external stakeholders. They will then draft a report that will be presented to the Board in May 2002.

## STAFF ANNOUNCEMENTS

## New editor appointed for newsletters

Communications Associate Katherine Lukewich has been appointed the new editor of the *At Work* and *Infocus* newsletters effective immediately.

Lukewich has been with the Institute for almost two years as web coordinator. She was responsible for the content and navigation of the Institute's site and was also a regular contributor to the newsletter.

Questions or comments about the newsletter may be directed to Lukewich by e-mail at klukewich@iwh.on.ca or by phone at (416) 927-2027 x2148.

## Institute Manager an Outstanding Teacher



Vicki Pennick, RN, MHSc, Manager of the Institute's Health Services, Research, Monitoring and Evaluation area, was honored recently for her outstanding teaching skills.

She was awarded the *Elizabeth Anne Beattie Award* at a recent faculty development workshop. This award is presented annually to a faculty member of the University of Toronto's Department of Family and Community Medicine Undergraduate Education Program. Nominations for this award are submitted by students and faculty.

"I was very flattered to receive this award; it is especially meaningful as it's a recognition from my students and colleagues," says Pennick.

For the past 10 years, Pennick has been a tutor for the innovative *Determinants of Community Health* course, part of the core curriculum for the University's medical students. She has also been on the course planning committee for the past nine years.

## RECENT PUBLICATIONS

The ethics of using secondary data for record linkage in epidemiology: Is informed consent always required? (Working Paper #162)

– P. Côté, C. Mustard, J. Frank.

The views toward X-ray use in patients with acute low-back pain among chiropractors in an Ontario community. (Working Paper # 133) – C. Ammendolia, C. Bombardier, S. Hogglohnson, R. Glazier

To order these or any other publications, contact Information and Events Coordinator Greer Palloo at (416) 927-2027 x2131 or by e-mail at info@iwh.on.ca



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