

at work

Information on workplace research from the **Institute for Work & Health**

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**Research Excellence
Advancing Employee Health**

New Chief Scientist brings wealth of experience to IWH

Dr. Tony Culyer, one of the world's leading health economists who has extensive experience in knowledge translation and clinical practice guidelines, will be joining the Institute in October when he assumes the position of Chief Scientist.

"We are delighted that a scientist of Dr. Culyer's calibre has agreed to take on this very important role," says IWH President & Scientific Director Dr. Cameron Mustard. "Tony will provide leadership in ensuring the excellence of our research mission. He will also contribute to aligning our research activities with the needs of our stakeholders."

Culyer has a strong history of contribution to the Institute. Since 1990, he served two terms as a member of the Institute's Scientific Advisory Committee.

"I have been a keen observer of the Institute since its foundation," Culyer said in a recent interview. "IWH is an exciting organization with a significant future of which I'd like to be a part. Also, my wife and I are very fond of Toronto."

Culyer, who is taking a leave of absence from his position as a Professor of Economics at the University of York in England, has lectured or taught at more than a dozen universities around the world, including the University of Toronto.

A co-editor of the international *Journal of Health Economics*, he has served on many journal editorial boards in the diverse fields of health economics, medicine, medical ethics, social science and medical law. To date, he has published nearly 200 articles in various publications and scholarly journals, and his work also appears in more than two dozen books.

He said he looks forward to a new, much closer relationship with IWH researchers and staff. He described his general approach to research management this way: "Appoint the right



Dr. Tony Culyer,
Chief Scientist

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New IWH web site offers easier access, more information

After nearly a year of planning and hard work, the Institute has launched its new web site. Users who visit the site, located at www.iwh.on.ca, should notice some major improvements in content as well as more obvious design changes.

"It is very important for the Institute to have a dynamic online presence to respond to the needs of our target audiences, who are increasingly coming to the site for up-to-date information," says Kathy Knowles Chapeskie, IWH's Manager of Communications.

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The Institute for Work & Health is an independent, not-for-profit organization whose 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

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Policy-Makers

THE LINK BETWEEN INCOME AND YOUR HEALTH

If your family has a low household income, chances are your health status is poorer than those with higher incomes. The relationship between household income and health has been well established.

But does the distribution of income in the area in which you live or “income inequality” have an impact on your health too? A relationship between the two has been observed in some research in the United States. But in Canada that doesn't seem to be the case, according to a new study published in the August issue of the *American Journal of Public Health*.

Chris McLeod headed up the study to find out if income inequality, household income, or the interaction between the two at a metropolitan level had an impact on health status. He linked self-reported health status data from three waves of the Canadian National Population Health Survey to data on household income for 53 metropolitan areas in Canada.

McLeod suggests that high income inequality might affect health status on two levels. First, it may lead to an under-investment in programs and services associated with good health such as education, healthcare and a clean environment. Second, it might lead to psychosocial issues such as stress, anxiety or shame among those less well off.

“While there was some evidence that poorer families living in metropolitan areas in Canada with higher income inequality had better health than those in lower income inequality areas, we didn't find any evidence that high levels of income inequality were related to poorer health,” says McLeod. “On the other hand, the relationship between household income and health status was consistently very strong.” Canada's universal health-care system and provincial equalization payments that help ensure a more equitable level of funding for services may partially explain the findings, adds McLeod.

What do the results of the study mean? The possibility of an increased private health-care market in Canada and issues of inequitable regional access to healthcare suggest income inequality may influence health status at some point in the future.

For researchers, this suggests that future studies try to uncover the underlying factors that might cause a relationship between income and health.

For policy-makers, the study adds to existing evidence for innovative approaches to address low household income. ▲

Chris McLeod conducted this study while a Research Associate at the Institute for Work & Health. McLeod is currently pursuing his PhD at the University of British Columbia. For more information, he can be contacted at chris.mcleod@chspr.ubc.ca.



people; give them the right environment; trust them to get on with it.”

As Chief Scientist, Culyer will assume many responsibilities. These include:

- supervising and mentoring relationships between IWH scientists and their academic institutions
- recruiting new scientific staff to address strategic development priorities
- leading internal discussions about existing research themes and coordinating decisions about new research areas
- supervising active communication between research and knowledge transfer and exchange functions
- achieving consistent excellence in research ethics, publication quality and “grantsmanship”

Culyer brings a wealth of leadership experience to his new job. He has served as vice-chair for Britain’s National Institute for Clinical Excellence (NICE). Established in 1999, this special health authority advises the government on the appropriate use of health-care technologies and also develops clinical practice guidelines, based on systematic reviews of both clinical and cost-effectiveness evidence.

He said he is especially interested in evidence-based practice and knowledge transfer and would like to see IWH broaden its involvement in these areas. “IWH deserves to be more of a national—and even international—institution than it already is,” he said.

Culyer holds an honorary doctorate in economics from the Stockholm School of Economics; he is a Founding Fellow of the (London) Academy of Medical Sciences and an Honorary Fellow of the Royal College of Physicians of London. He was made Commander of the British Empire in recognition of his work for the organization and funding of research in the British National Health Service. He plays the organ and is choir director of an Anglican parish church in Yorkshire. ▲▲



Clinical

CLINICIANS EXPECTED TO WELCOME SHORTER VERSION OF POPULAR DASH TOOL

Clinicians who use the 30-item DASH Outcome Measure to assess and treat patients with arm symptoms will soon have access to a shorter version of the tool. It’s called the *QuickDASH* and, according to one of the developers, Dr. Dorcas Beaton, in early testing the new version appears to be just as reliable as the original.

The 30-item DASH (Disabilities of the Arm, Shoulder and Hand) tool was developed by a collaborative group including the IWH and the American Association of Orthopaedic Surgeons (AAOS). Since it first came out in 1996, the DASH has become popular among doctors, physiotherapists, orthopedic surgeons, hand surgeons, occupational therapists, physiotherapists and physiatrists who treat people for a variety of upper-limb disorders.

“Patients weren’t concerned about the length of the original DASH, but we did have requests from busy clinicians who said they just couldn’t handle a 30-item score,” says Beaton, an IWH Scientist and Director of the Mobility Program Clinical Research Unit at St. Michael’s Hospital in Toronto.

The quest for a shorter, reliable version of the DASH involved Beaton and co-researchers Dr. James G. Wright, an orthopedic surgeon at Toronto’s Hospital for Sick Children, and Dr. Jeffrey Katz, a rheumatologist and director of the Arthritis and Musculoskeletal Clinical Research Center at Brigham and Women’s Hospital in Boston.

“A target of 11 items was set,” says Beaton. “This sounds like a simple decision, but as scientists, we know that dropping items from a carefully-designed questionnaire reduces its precision to some degree.”

Using what are known as “item reduction techniques,” the researchers say they were able to drop certain questions without sacrificing the tool’s quality



or reliability. The results were reviewed by members of the original DASH development team who agreed on the final version of the *QuickDASH*.

The *QuickDASH* questionnaire asks patients to think back over the past week and describe their ease or difficulty in performing certain tasks—opening a jar, carrying a shopping bag, and taking part in recreational activities that require a degree of force when using the arm or hand. The *QuickDASH* also contains questions about symptoms, sleep quality, and the person’s ability to do “usual work.”

Beaton then revisited data available from different DASH studies and tested the *QuickDASH*’s reliability, validity, and sensitivity to change. Although researchers plan to test the shorter tool on its own, she says, “We are very pleased with the reliability and validity levels of the *QuickDASH* when we teased it out of data collected using the longer version.”

The *QuickDASH* should be available before the end of 2003, and the developers think it will be warmly welcomed by clinicians and others doing research studies, case series and program evaluation. “But it’s important for these users to understand that the longer, 30-item version still has its place and in many situations is preferable to the shorter tool,” Beaton says. ▲▲

Beaton’s work on the QuickDASH project was supported by a PhD fellowship grant and a New Investigator’s Award from the Canadian Institutes of Health Research (CIHR).



Workplaces

SEVEN-YEAR PROGRAM TO EXAMINE EFFECTIVENESS OF WORKPLACE INTERVENTIONS

If intervention research was based on hundreds of workplaces, across many regions, over many years, what would it tell us? Would it be possible to identify which interventions were the most effective?

IWH Senior Scientist Dr. Donald Cole and a team of researchers from the Institute and four universities hope to answer these questions together with partner organizations. “We need to learn what kinds of workplace interventions will reduce the burden and severity of musculoskeletal (MSK) injuries,” says Cole.

The Workplace Health Intervention Research (WHIR) project launched its pilot phase with funding from the Canadian Institutes of Health Research (CIHR) and plans to continue its research program over seven years.

The program has four phases: establish a cohort of manufacturing companies; administer a survey on workplace characteristics, human

resource management and occupational health and safety programs; complete workplace assessments within selected companies; and conduct workplace interventions that will be guided by company needs and intervener capacities.

The pilot phase is currently under way. It involves contacting several hundred small- and medium-sized companies, and administering a survey to give a picture of organizational structure and occupational health and safety-focused management.

This will be followed by a more intensive assessment of companies interested in extending their participation. An interdisciplinary group of researchers will spend time meeting with the joint health and safety committee, collecting existing data, observing the workplace, interviewing key people and holding focus groups. The researchers will identify areas of possible improvement

and document them in a report. Workshops conducted by the researchers will provide feedback to management, supervisors and worker representatives.

After the workshop, many companies may initiate their own changes, and will keep in contact with the researchers. The researchers also want to engage some companies in intensive and sustained interventions. Work at these companies will be evaluated to ensure a fuller exploration of their effectiveness in making the kinds of changes that are needed to improve workplace health and reduce MSK injuries.

“Most of the intervention research conducted in the past was done with the ‘better-performing’ companies,” says Cole. “We believe this created a bias in results, reducing the strength of the available evidence. With our proposed research program, we should be better able to assess more clearly what really does and does not work for companies.” ▲▲



Knowledge Transfer

EVALUATION WORKSHOP PLANNED FOR NOVEMBER

Anyone can design and implement a workplace intervention aimed at improving health and safety on the job. But the key to success lies in proper evaluation—knowing if the intervention accomplished what you sought out to do.

Health and safety practitioners are invited to attend a two-day workshop called *Planning and Conducting Evaluations in Health and Safety: An Introductory Workshop*. The event, scheduled to take place in Toronto on November 24 and 25, is being organized by the IWH in partnership with the Occupational Health

and Safety Council of Ontario (OHSCO) and the Ontario Chapter of the Canadian Evaluation Society (CESO).

“This is just one of a series of IWH workshops designed with our partners in the health and safety community in response to the needs they identified,” says Jane Brenneman Gibson, Director of Knowledge Transfer & Exchange.

The guest speaker will be Michael Quinn Patton, the former president of the American Evaluation Association, who has lectured and conducted workshops on evaluation around the world. His areas of expertise include “futuring,”

program evaluation, strategic planning, policy analysis, management consulting, and system analysis. He has worked in many areas including health, corporate planning, human services, poverty programs, leadership development, staff training and mental health.

The workshop will also feature concurrent half-day sessions focusing on three specific topics: evaluating training interventions, building evaluation into a service consulting model, and evaluating products and services. ▲▲

For more information on the workshop, please contact Vickie Cullmann at IWH by e-mail at vcullmann@iwh.on.ca or by phone at 416-927-2027 ext. 2106.

Quilt project dedicated to memory of young workers

It looks like any other quilt—brightly coloured squares of fabric stitched together to delight the eye and possibly decorate a favourite room. But a closer look reveals just how different and special this quilt really is.

Each of the 100 fabric blocks displays the photo of a young Canadian who was killed on the job, along with part of the story of his or her death. Each square also contains personal mementos of lives that were ended too soon—a hockey team patch, or a symbol of a favourite hobby.

The Canadian LifeQuilt, a project envisioned and created by Toronto textile artist Laurie Swim, was unveiled this April at the Industrial Accident Prevention Association's (IAPA) national health and safety conference.

Described as “a permanent work of art dedicated to young people killed and injured at work,” the two-by-six metre quilt was designed around a huge central panel. It depicts a young person, hands raised toward the sky. This image is overlaid with ribbons which have been embroidered with hundreds of names of young people injured on the job.

Many parents, siblings and friends of the young people whose photos and names appear on the quilt attended the ceremony. The event also marked the launch of a new organization called, Threads of Life–Workplace Tragedy Family Support Association.

Threads of Life was organized to help and support families who experience a life-altering work-related injury or illness, explains Robin Kells, who is assistant to the President of IWH and sits on the Threads of Life executive committee.

“This will include referring them to appropriate counselling, connecting them to others who have experienced the same pain and suffering, and supporting them through the workplace investigation and inquest process, which usually follows a job-related death,” she says. “The group will also guide people who want to have a voice in promoting workplace injury prevention within their own communities.”

Kells' only brother, Sean, is depicted on the LifeQuilt. In 1994, at the age of 19, he was killed in an explosion on the third day of a



Detail of Sean Kells' panel on the Canadian LifeQuilt.

part-time job. “Sean received no safety training and didn't know that the work he was doing was dangerous,” says Kells.

IWH President & Scientific Director Dr. Cameron Mustard says injuries among young workers are an urgent priority. “The Institute is one of many organizations supporting the work that Threads of Life is doing.”

To read the stories of the 100 young people on the Canadian LifeQuilt, please visit www.youngworkerquilt.ca.

The new organization is currently seeking funding and donations of in-kind services such as mailing, guidebook production, and crisis counselling training for its volunteers. For information, please contact Robin Kells at 416-927-2027, ext. 2117 or rkells@iwh.on.ca

Charting a course for the future

Following many months of internal deliberation and staff consultation, the Institute has completed its new strategic plan for the period 2003-2007. The plan provides a framework for IWH research and knowledge transfer activities for the next five years.

“Over the next five years, we will build on the successes and strengths that we've achieved to date,” says Institute President Dr. Cameron Mustard. “Our primary focus will continue to be on musculoskeletal work-relevant injuries and illness in the workplace.”

The new plan does see a slight change in the Institute's mission statement and an emphasis on increased partnerships and collaboration with stakeholders.

“The plan will not only enable us to fulfil our mission, but will build a strong foundation that will foster the Institute's growth and development well into the future,” says Mustard.

IWH's New Mission Statement

We conduct and share research with workers, labour, employers, clinicians and policy-makers to promote, protect and improve the health of working people.

Institute Goals for 2003-2007:

- Conduct innovative, high-quality transdisciplinary research
- Make research evidence available, understandable and usable for decision-makers to assist in creating safer and healthier workplaces
- Be a model of a healthy workplace
- Foster intellectual independence and organizational integrity

Workplace disability prevention book co-edited by IWH scientist

A new book that showcases the expertise of several IWH scientists is now available to anyone with a special interest in workplace disability.

Entitled *Preventing and Managing Disabling Injury at Work* (Taylor & Francis, 2003), the book was co-edited by Drs. John Frank and Terrence Sullivan, and includes chapters from more than a dozen contributors, including IWH scientists Drs. Michael Kerr, Renée-Louise Franche and Donald Cole.

According to the publisher, the volume provides a “unique, evidence-based, state-of-the-art” look at what works best in the prevention of workplace disability.

“Work-related disability is a growing issue in businesses and other workplaces,” say

Frank and Sullivan. “Changes in the nature of disability and the nature of work itself warrant a new approach to this important but understudied topic.”

The underlying philosophy of their work is what they call “the essential linking of the workplace, the clinician, the insurer and the worker in the recovery process and in preventing subsequent disability events at work.”

The book is aimed at a variety of audiences in the work and health community, and contains chapters on diverse topics such as:

- understanding risk factors in injury and return to work
- worker accommodation, clinical interventions and return to work

- injury prevention and return to work
- the role of the media in disability management
- economic incentives and workplace safety
- regulatory approaches to preventing workplace injury

Frank, a physician and IWH Senior Scientist, is also a Professor of Public Health Sciences at the University of Toronto. Sullivan, who is Vice-President of Cancer Care Ontario and IWH Adjunct Scientist, is an Associate Professor in Health Policy Management and Evaluation, also at the University of Toronto.

To order a copy of this book, visit the publisher's web site at www.tandf.co.uk.

New IWH web site offers easier access (continued from page 1)

“We hope they’ll find the new site more comprehensive, accessible and easier to navigate.”

What will users find when they visit the new site?

- the latest IWH research, sorted under our nine research themes with related Institute projects, newsletter articles and knowledge transfer activities
- a new section dedicated to knowledge transfer and exchange
- information “bundles” that are targeted to our major audiences, including clinicians, workplace parties, policy-makers, researchers, knowledge transfer specialists and students
- downloadable versions of some recent IWH working papers



- Zoom, a new quarterly web profile featuring key research and knowledge transfer activities
- a bigger, better search engine that allows users to find information by audience, topic and author
- easy, one-stop access to interesting, important information about IWH
- web links to other relevant work-and-health resources.

The new site incorporates feedback obtained from our stakeholders including clinicians, workplace parties, policy-makers and the media. They were interested to find out more about current IWH projects and KTE initiatives, and requested online access to the Institute's working papers.

You can share your opinions about the new web site by contacting Communications Associate Katherine Russo at krusso@iwh.on.ca or at 416-927-2027 ext. 2148. Web users can also complete an online feedback form located at the bottom of each screen.



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