MUPDATE



INSTITUTE OF NUTRITION, METABOLISM AND DIABETES

MAY 2005

A message from the Scientific Director

As I review the content for this our second issue of the INMD Update, I realize that somewhat by accident it accurately reflects the growth in activity currently taking place in the arena of public health, healthy living and healthy body weight research.

In this issue we are pleased to profile two of our young investigators involved in population health research on obesity and healthy body weight. Dr. Scott Lear's work will help us to understand the influence of ethnicity on the risk of complications due to

excess body weight and physical inactivity. PhD student Suzy Wong is tackling the challenge of collecting useful information to help identify determinants of health in the complex, real world in which children live and play. In a related update, we describe how INMD's research platform project, Canada on the Move, will hopefully grow from its current incarnation as a relatively simple data collection and research tool to a uniquely innovative platform for research, partnership, training and evaluation. Also,

we have news about an upcoming Canadian Journal of Public Health supplement, coordinated by Health Canada's Office of Nutrition Policy and Promotion, which endeavors to synthesize and translate current knowledge about the determinants of healthy eating.

Although it has been six months since our last update, we are now confident that we can bring you regular issues with timely information each January, May and September. In future issues we will focus on other themes such as the

cutting edge of the basic science of body weight regulation or current research on novel clinical treatments. In this issue and in future issues we will continue to include news about funding opportunities and upcoming scientific meetings and conferences. We welcome your feedback as we continue to grow and develop this newsletter. Please email inmd communications@sfu.ca with any comments and suggestions. Have a great summer!

Dr. Diane T. Finegood

RESEARCHERS:

Researcher links ethnicity and weight-related disease

Vancouver researcher Dr. Scott Lear developed an interest in studying populations at high risk for obesityrelated illnesses such as diabetes and heart disease when he realized that lifestyle management intervention simply did not help enough people.

"Dealing with body weight or body fat is quite difficult on an individual level," he says, citing examples from his experience in cardiovascular rehabilitation. "Lifestyle behaviours don't change," he explains. "We even end up having to increase people's medications."

Lear began to focus his research in this area when he received a three-year research grant through INMD in 2003. His grant proposal was titled "Obesity in the Community: A comparison of the differential distribution of body fat in four ethnic populations". It was known that being overweight increased the risk of health problems, however, most of the research was based on studies of men of European descent only, although practitioners were noting a marked increase in obesity in groups with other ethnic origins. And as Lear noted in his proposal, "At the same weight and/or stomach size, people of Aboriginal,

Chinese or South Asian descent have a higher amount of body fat and higher levels of heart disease risk factors compared to white men and women."

Lear has now received funding to expand his studies, and clarify the relationship between ethnicity, body fat distribution and risk factors for diseases such as diabetes and cardiovascular dysfunction.

This year, based on preliminary data, Lear's application was successful in the CIHR open competition. His two-year grant will allow him to develop a "Multicultural community health assessment trial" to consider "body fat distribution on sub-clinical atherosclerosis in a multi-ethnic population".

His pioneering approach was recently acknowledged by his colleagues and the community when he was singled out to profile his work during a media event announcing the results of this year's CIHR open grants competition.

Lear is an Assistant Professor in Kinesiology at Simon Fraser University, an Adjunct Professor in the Cardiology Division at UBC, and Assistant Academic Director for the Healthy Heart Program at St. Paul's Hospital in Vancouver. It is because Vancouver enjoys such ethnic diversity that Lear's work is possible here. He hopes to recruit 800 people to his studies before he analyzes the data.

At some point, he would like to broaden his research more and study genetic reasons for the differences between ethnic groups.



MP for Vancouver Centre Dr. Hedy Fry, flanked by members of the Simon Fraser University (SFU) community, at a recent press conference to announce increases in CIHR funding and honour recipients of grants. From left to right: Dr. Fry, SFU President Dr. Michael Stevenson, SFU Vice-President of Research Dr. Mario Pinto, CIHR grantee Dr. Scott Lear, INMD Scientific Director Dr. Diane Finegood.





INSTITUTE OF NUTRITION, METABOLISM AND DIABETES

Canada on the Move moves toward an expanded platform

Canada on the Move (COTM), INMD's web-based population health research platform, is "on the move" once again! After a first successful year as a novel, but relatively simple, data collection and research tool, the project is now ready to expand and pursue a larger vision. COTM is moving towards establishing itself as an innovative platform for collaboration and evaluation as well as research.

An expanded COTM could offer a new approach to linking researchers, health promotion/disease prevention practitioners, and policymakers for their mutual benefit. In this way, it would support current efforts to create a sustainable pan-Canadian intersectoral healthy living strategy.

In addition, it would facilitate enhanced data collection, analysis, and knowledge exchange, all of which fit with the growing demand for accountability within government and among non-governmental organizations working to improve the health of Canadians. Finally, from a research perspective, expansion would provide useful data to better clarify links between health choices and the contexts in which Canadians live.

COTM has already proven its ability to serve as a platform for research. Results from the first round of funded research projects will be published in the December 2005 issue of the Canadian Journal of Public Health. Furthermore, a recent collaboration with the Canadian Diabetes Association (CDA) and Dietitians of Canada (DC), funded by the Public Health Agency of Canada, highlighted COTM's capacity as a platform for partnership

and potential as a source of evaluation information. In March 2005, INMD, CDA and DC drew a diverse audience together to discuss COTM's next steps. Approximately 60 health promotion/disease prevention practitioners, researchers, and policymakers participated and offered resounding support for expanding COTM.

Expansion of the platform would mean that COTM would continue to collect information from individuals about levels of physical activity and barriers to physical fitness for use by researchers. However, the platform would add

mechanisms of information exchange to allow groups participating in COTM to provide information about their programs and also receive back pertinent evaluation information.

It would also supply groups with program enhancement tools to assist them in engaging with COTM. In the process, COTM's data collection tools would be established as a common system of metrics through which a variety of health promotion/disease prevention efforts could be assessed and even compared by

researchers.

These new capacities would lead to richer research results, enhanced program evaluation capacity, and a deeper knowledge base for policymakers. The current COTM platform is uniquely poised to link and enrich the outcomes achieved by a range of health promotion/ disease prevention programs. Significant new resources will need to be obtained through partnerships to effect the proposed changes, but the enthusiasm palpable at the March meeting bodes well for COTM.

Competition spurs INMD staff to greater activity levels

COTM participants are helping all Canadians by contributing to national health research, but they are also able to derive an almost instant benefit for themselves.

Participants with pedometers who "donate their steps" on COTM's website can utilize a graphing tool to monitor daily activity, and use their graph's blue bars as an impetus to get "on the move". They can then see how small changes as simple as getting off the bus a few blocks before one's usual stop, making it a habit to park at the farthest end of the parking lot, or going for a walk at lunchtime can make a big difference in their step counts over time.

At INMD, we are encouraging each other to become more active by participating in a monthly contest. Those with the most steps or the highest average count have permission to gloat, and prizes are given out for achievements such as consistent

Generally, the group agrees that although those blue bars are not always a cheering sight, they do increase awareness.



The INMD COTM Team with our pedometers. From left to right: (top) Assistant Director Hasan Hutchinson, Scientific Director Diane Finegood, Project Manager David Crouch, Information Officer David Hendry, (bottom) Manager of Communications Nola Erhardt, Administrative Assistant Charlene Phung. Missing: IT Consultant Rainer Beyleveldt, COTM Director of Partnerships Adria Rose.

As Charlene Phung says, "It's made me more aware of my activity level. I exercised before but I wasn't consistent. I think wearing a pedometer, and our competition, makes me consistent."

Last fall, about ten months after the COTM website was launched, Canadians had donated more than 450 million steps to health research. Now, after about 16 months, the tally is almost 650 million steps. Therefore, INMD is not alone in finding COTM useful!

With planned expansion of COTM, (see related article this page) participants may be able to derive even greater benefits from the program in the future.



Developing programs to improve children's health

When she finished her Master's degree in the area of physical fitness and obesity at Queen's University in Toronto, Suzy Wong realized she had learned more than simply multiple exercise intervention strategies and how to use sophisticated equipment such as magnetic resonance imaging and spectrophotography machines.

"During exercise supervision and testing, I had the opportunity to interact extensively with the participants," she recalls. "This benefited me personally, as well as providing me with insight into the challenges associated with obesity and physical activity."

But what she found frustrating was that, although participants loved the programs, when the intervention stopped, they would quit exercising.

"That's what really prompted me to do what I do now," she says.

What she does now is study population health. Wong earned a Canada Graduate Scholarships Award through CIHR last year, and with her PhD supervisor Dr. Roy Cameron in the Health

Studies and Gerontology Department at the University of Waterloo, Wong is helping to create a School Health Action, Planning and Evaluation System (SHAPES), a data collection and feedback system.

SHAPES is being jointly developed by The Centre for Behavioural Research and Program Evaluation (funded by the National Cancer Institute of Canada and the Canadian Cancer Society), and the Health Behaviour Research Group at the University of Waterloo.

The system is being constructed in modular form, with a different lifestyle focus for each module. Data are collected from students in the schools using a brief, computer-readable questionnaire. "It's short and it's easy for kids to fill in, and it's easy for us to process," explains Wong. But because data are self-reported, information has to be validated. To do this, investigators go into the schools to see how well selfreported data matches what they can measure. The module is then adjusted to be more reliable.

For example, Wong is currently



Researcher Suzy Wong in her office, developing and analyzing physical activity intervention programs for school children.

validating data on physical activity. Children were asked to report their height and weight, and answer questions on physical activity level. The reports are now being compared to measured heights and weights, and activity level based on one week wearing an accelerometer, which is like a pedometer, but it records speed in addition to steps. Wong says lack of correlation can be based on reluctance to acknowledge reality, but it can also reveal flaws in the questionnaires. Children may simply not understand some of the questions.

After the physical activity module is completed, Wong is eager to move on to creating a module on diet and nutrition. Part of her enthusiasm comes from knowing that this work can make a difference. Before she arrived at the University of Waterloo, the first module, which focuses on smoking in the schools, was already in use. More than 250 elementary and secondary schools have used the module, impacting more than 100,000 students, and Wong says the schools are happy. Participating schools receive a 12-page report that summarizes school-level findings, compares them to national and provincial statistics, and offers intervention suggestions.

"They get something out of it, and we get something out of it."

Eventually, the group wants to develop a national database to enable communities to "easily identify best approaches", and "economically access appropriate existing intervention resources".

More information can be found at by visiting the SHAPES website at: http:// www.ahs.uwaterloo.ca/%7Emanske/ SHAPES/SHAPES.htm.

New healthcare policy journal calls for papers

Longwoods Publishing, CIHR's Institute of Health Services and Policy Research, the Canadian Association for Health Services and Policy Research, and Editor-in-Chief Brian Hutchison have announced the birth of a new quarterly journal, Healthcare Policy, and have issued the journal's first call for papers.

Healthcare Policy will publish original scholarly and research papers that support health policy development and decision-making in spheres ranging from governance, organization and service delivery, to funding and resource allocation. Healthcare Policy will strive to meet the needs of readers from diverse backgrounds including health system managers, practitioners, policy makers, educators and academics.

The journal will support interdisciplinary research on health services and policy, and be open to submissions from researchers from a broad range of disciplines, including social sciences, humanities, ethics, law and management sciences as well as others. Submissions from decision-makers or researcher-decision maker collaborations that address knowledge exchange and application will be welcomed. Themes addressed will be broad.



Longwoods Publishing anticipates the first issue of the journal will be available (electronically and in print) by late summer or early fall 2005. Manuscripts in both official languages are invited. Papers will be reviewed and published in the language of submission. Abstracts will be translated.

For information on submitting a paper to Healthcare Policy for peer review, or on becoming a reviewer for the journal, please contact Managing Editor Dianne Foster-Kent at dkent@longwoods.com



INSTITUTE OF NUTRITION, METABOLISM AND DIABETES

Healthy eating requires an understanding beyond individual choices

To support healthy food choices, policies and programs need to consider not only factors that impact individual behaviour, but also the social factors that further influence food choices. However, we do not have a strong research base to describe what Canadians are eating, the factors that determine food choices, or the effectiveness of currently

Nominations sought for CIHR partnership award

Applications are being invited for CIHR's Partnership Award, which recognizes partnerships "that exemplify excellence by bringing health research communities together to create innovative approaches to research; develop research agendas that are responsive to the health needs of Canadians; and/or accelerate the translation of knowledge for the benefit of Canadians".

Details and application forms can be found at http://www.cihr-irsc.gc.ca/ e/27367.html. Deadline for nominations is June 6, 2005, and the recipient (s) will be recognized November 22, 2005 at the annual CIHR Awards Ceremony.

available interventions designed to support healthy food habits. Development of clear and comprehensive evidence is critical to developing action plans that will truly promote nutritional health. To provide academics, policy-makers and community health professionals with the information that is currently known about the determinants of healthy eating, Health Canada's Office of Nutrition Policy and Promotion (ONPP) has spearheaded an ambitious project to identify what we do and what we don't know about factors that affect our eating habits.

Due for release by the Canadian Journal of Public Health in June, a special supplement will address topics such as the perceptions of healthy eating, the determinants of healthy eating at various life stages, including factors that influence children and seniors, and some of the special challenges that impact aboriginal peoples and people with low incomes. The supplement will not only review current knowledge, but identify gaps and suggest directions for future research.

This work has obvious connections to the mandates of two CIHR Institutes, and

both lent support to the project. A foreword to the supplement was jointly written by Scientific Directors Dr. Diane Finegood from INMD and Dr. John Frank from the Institute for Population and Public Health. In their remarks, they stress the need for multidisciplinary,



Mary Bush, Director General of Health Canada's Office of **Nutrition Policy and** Promotion.

multi-sectoral, comprehensive health research agendas that address specific issues such as the rising increase in weight problems and obesity that leads to chronic disease, and more generally, the multitude of social and environmental factors that impair the ability of many Canadians to lead healthy lives. To be effective, they add, this research must focus at the community and

population levels. This suggestion is re-iterated in a foreword provided by Mary Bush, Director General of the ONPP. Furthermore, she points out that in many cases, action on public health matters is ahead of the evidence base due to pressures to take action, and describes the supplement as a "call to action" to develop the necessary knowledge, based on appropriate research, evaluation and surveillance.

The supplement will include six articles based on a series of synthesis papers recently produced for Health Canada. More than 20 Canadian experts in applied nutrition, health promotion and population health were involved in the original synthesis work, either as authors or reviewers of the papers. An overview article is provided in the supplement by Dr. Kim Raine, from the Centre for Health Promotion Studies at the University of Alberta, and a current member of the Institute Advisory Board for INMD.

Development of the supplement was coordinated by Michelle Hooper and Ann Ellis from ONPP, and Brenda McIntyre from the Community Programs Directorate, First Nations and Inuit Health Branch.

Institute of Nutrition, Metabolism and Diabetes

Simon Fraser University 8888 University Drive, Room WMC2805 Burnaby, BC, V5A 1S6 Tel: 604-268-6707; Fax: 604-291-3055 http://www.cihr-irsc.gc.ca/e/12043.html

Newsletter:

inmd_communications@sfu.ca (Nola Erhardt)

General Information: inmd3@sfu.ca (Meena Bagri)

CIHR Corporate Headquarters

160 Elgin Street, Room 97, Address locator: 4809A Ottawa, ON, K1A 0W9 http://www.cihr-irsc.gc.ca/ e/9833.html

Give us your news!

If you've had a paper published that falls within the INMD mandate, we want to know! Please send details or a copy to:

inmd_communications@sfu.ca.

We want to keep abreast of current research, and keep in touch with our community of

Also, your help will allow us to respond to information requests and to produce publicity materials regarding scientific advances.





INSTITUTE OF NUTRITION, METABOLISM AND DIABETES

LEETINGS AND CONFERENCES:

14th European Congress on Obesity

abstract deadline passed TITLE:

International Conference June 1-4, 2005

WHERE: Athens, Greece

MORE: http://www.eco2005.gr/index.html

Annual Canadian Federation of Biological Societies Meeting June 21-24, 2005

TITLE: Lifestyle and Molecular Bases of Health and Disease

WHERE: Guelph, Ontario

MORE: http://www.cfbs.org/annual.html

Agri-Food Innovation Forum June 19-21, 2005

TITLE: Food, A Healthy Value Proposition WHERE: Toronto, Ontario

MORE: http://www.agrifoodforum.com

Chronic Kidney Disease Summit June 23-24, 2005

TITLE: First Summit WHERE: Vancouver, B.C.

MORE: http://www.bckidneysummit.com

Canadian Public Health Association 96th Annual Conference abstract deadline passed

TITLE: Mapping the Future of Public Health: People, Places and Policies Sept. 18-21, 2005

WHERE: Ottawa, Ontario MORE: http://www.cpha.ca

International Chronic Disease Management Conference abstract deadline passed

TITLE: Global Perspectives on Chronic Disease Management

WHERE: Calgary, Alberta

MORE: http://www.calgaryhealthregion.ca/

North American Association for the Study of Obesity abstract deadline passed Oct. 15-19, 2005

TITLE: Annual Scientific Meetina WHERE:

Vancouver, B.C.

MORE: http://www.naaso.org/annualmeeting05/2005 annual meeting.asp

Canadian Diabetes Association/Canadian Society of Endocrinology and Metabolism abstract deadline passed Oct. 19-22, 2005

TITLE: 9th Annual Conference and Meetings

WHERE: Edmonton, Alberta

MORE: http://www.diabetes.ca/Section_Professionals/profconf2005.asp

ID FUNDING OPPORTUNITIES:

There are currently no funding opportunities through INMD, however, we expect to have new competitions posted by the middle of June, 2005, or in the weeks immediately following. Please check our website for regular updates on these opportunities.



Sept. 26-29, 2005