



A NEW FOCUS ON INTERVENTION RESEARCH

INMD and partners support population health intervention research

WHAT IS INTERVENTION RESEARCH?

Programs and policy initiatives related to healthy living and chronic disease prevention have the potential to significantly improve health at the population-level. Population health intervention research seeks to enhance the evidence base on which the efficacy, effectiveness and cost-effectiveness of population level interventions can be judged. Given the multi-sector, multi-level collaborations needed to build an evidence base, many structural changes are required to encourage knowledge exchange and collaboration between researchers, practitioners, policy makers and others with significant roles to play. INMD is involved at all these levels in its ongoing effort to promote intervention research in Canada.

INTERVENTION RESEARCH RFA

INMD and partners have launched a new funding program to support prompt initiation of intervention and evaluation research on programs, events, and/or policy changes that have been initiated by others and have the potential to impact healthy living and chronic disease prevention among Canadians at the population level.

Letters of Intent (LOIs) and invited full applications for operating grants under the "Intervention Research (Healthy Living and Chronic Disease Preven-

tion)" competition will be accepted on a rolling basis until available funding has been depleted. Invitations to submit full applications will be sent within 2 to 3 weeks of LOI receipt, and must be submitted within 3 months. Full applications received after this

time will be re-evaluated for continued relevance to this program prior to being peer reviewed. Notification of decision is within 3 to 4 months of receipt of full application. Earliest start date is within one month of notification of decision. For more details, please visit www.cihr-irsc.gc.ca/e/32835.html

PARTNERSHIPS

INMD is working with its partners to increase the quantity and quality of population health intervention research in Canada by providing innovative funding opportunities for Canadian researchers. Part of this effort will involve de-

veloping and supporting platforms and tools that facilitate the analysis of population health interventions and part will involve supporting efforts to increase the dissemination and use of research results by health practitioners. We recognize that success can only come through building partnerships at all levels (from local to international) and leveraging the excellent efforts that already exist. If you have a population health intervention effort that we should know about, please don't hesitate to drop us a line at inmd_communications@sfu.ca.

OUR PARTNERS

- Heart and Stroke Foundation of Canada (HSFC)
- Institute of Population and Public Health (IPPH)
- Public Health Agency of Canada (PHAC)
- Institute of Aboriginal People's Health (IAPH)
- Institute of Cancer Research (ICR)
- First Nations Inuit Health Branch (FNIHB)
- Centre de recherche en prévention de l'obésité (CRPO)

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RESEARCHERS WE FUND

Dr. Charlene Elliott: The Marketing of Fun Foods



Dr. Charlene Elliott

“RESEARCH HAS SHOWN THAT EATING PRACTICES ARE LEARNED EARLY ON AND PERSIST OVER TIME. SO IF WE ARE SENDING THIS MESSAGE TO CHILDREN FROM A VERY YOUNG AGE, THEN WE ARE SETTING THEM UP FOR A PROBLEMATIC RELATIONSHIP WITH FOOD.”

A number of the foods on supermarket shelves designed to appeal specifically to children (“fun foods”) are unhealthy. But what Dr. Charlene Elliott would like to raise awareness about are some of the less obvious, but potentially more damaging problems, that marketing food based on its entertainment value could create for future generations.

“Nutrition aside, what we have to take a look at is the way in which this kind of marketing impacts children’s relationship with food itself. It has the potential to create an unhealthy rapport with food.”

Elliott has completed a pilot study on marketing “fun foods” to children in the Canadian supermarket. These are regular food products - not “junk food” or confectionary items - designed to appeal explicitly to children. To qualify for Elliott’s study, the food packaging had to make it obvious to children that this was a product meant specifically for them. Packaging had to employ obvious strategies such as: allusions to fun or play on the package; association with children’s television programs; use of children’s cartoon iconography; or inclusion of puzzles or competitions aimed at children.

“A characteristic of “fun food” is that it unambiguously presents itself as such,” Elliott says. Consider, for example, oatmeal that contains “eggs” that hatch into baby dinosaurs when boiling water is added. Imagine fruit snacks that leave a tattoo on the tongue. Picture yogurt tubes that glow in the dark.

An obvious problem with marketing food based on its entertainment value is that it does not teach children healthy eating habits.

“The very practices that we recognize make adults obese, or cause a problem with weight, are the very practices that are being foregrounded in the marketing of “fun foods,” Elliott explains. “These are practices that focus on the idea of using food for entertainment, sport and distraction.”

But perhaps more importantly, the entertainment value is premised on artificiality. What makes this food “fun” is that it either looks or acts in ways in which normal food does not.

“The food is prefaced on its distance from “real” food,” explains Elliott. “It treats the “artificial” in food as a good thing. Given that artificiality in food is generally framed as “bad” from an adult perspective, it is troubling that these very themes of artificiality are foregrounded as a selling feature in this type of children’s fare.

“Research has shown that eating practices are learned early on and persist over time. So if we are sending this message to children from a very young age, then we are setting them up for a problematic relationship with food.”

How much of a market is there for “fun foods”?

Elliott’s research showed that this marketing strategy has moved far beyond the cereal aisle, where it began. Of 367 products she identified, only 11.4% were breakfast foods. The majority, 70.3% of the sample, were dry food items meant for lunches or snacks. Beverages accounted for 17.2% of the sample, and dinner items were low on the list at 1.1%.

The spread of these foods through the supermarket, combined with what Elliott terms the “pester-power” of children, suggests a growing impact on children’s diets. Studies show that children can influence up to 80% of a family food budget.

Policy-makers and health practitioners need to find ways to help parents deal with this type of marketing, Elliott suggests.

“We need to consider how to deal with this category in light of creating a healthy diet.”

Complete results of Elliott’s study are currently under review and she has applied for funding to extend the work. This research forms an appropriate intersection between her interest in food packaging, food marketing, the “framing” of taste, and her interest in children, youth and media. She teaches courses in Communication in the School of Journalism and Communication at Carleton University.



FUNDING NOTE

Our Intervention Research RFA

has a rolling deadline. LOIs may

submitted at any time. See

www.cihr.ca/e/32835.html

for more details.

FOOD INSUFFICIENCY RELATED TO OVERWEIGHT CHILDREN

Results from the Canadian Community Health Survey

According to the results of the 2004 Canadian Community Health Survey, approximately one-fifth of Canadian families (around 1.4 million people) live with food insecurity.

Using data from the Longitudinal Study of Child Development in Quebec (1998-2002), Lise Dubois and colleagues' 2006 study indicates that there is an association between food insufficiency and obesity among preschool children. This relationship exists over and above the effects of living in income insufficient families. Children born with low-birth-weights who live in a household that experienced food insufficiency are at higher risk of being overweight at 4.5 years of age.

Various explanations related to food adequacy and diet quality can be formulated to explain this association. Parents experiencing food insufficiency may be overprotecting their younger children by giving them more food than they need. Furthermore, when resources are limited, a common coping strategy is to consume less expensive foods. In

this situation families may have enough to eat, but the quality of their diet is reduced.

Finally, following a period of food restriction individuals may have overeating or binge eating behaviours when food is available. An alternative explanation may be related to the Barker Hypothesis in which the relationship between low-birth-weight and chronic diseases later in life may be related to fetal malnutrition.

Given that the highest risk for overweight at 4.5 years is among low-birth-weight children who experience food insufficiency in their preschool years, supportive interventions targeting low-income and food insufficient families, including pregnant women, are recommended for preventing overweight and obesity among their children.

This news item was provided by the Canadian Research Institute for Social Policy (www.unb.ca/crisp).

“ONE-FIFTH OF CANADIAN FAMILIES (AROUND 1.4 MILLION PEOPLE) LIVE WITH FOOD INSECURITY”

BUILDING BRIDGES 2006

Over 550 conference delegates attended the Building Bridges 2006 conference held jointly by the **Canadian Society for Exercise Physiology (CSEP)** and the **Canadian Society for Psychomotor Learning and Sport Psychology (SCAPPS)**. It was an unqualified success. With a goal of “building bridges” between 2 separate societies as well as between researchers and practitioners, a full day of the 3 day conference was dedicated to showcasing integrated research. Keynote speakers included Silken Laumann discussing her *Active Kids* movement and Col. Chris Hadfield, astronaut with the Canadian Space Agency, while symposia including Children’s Physical Activity across the Ages, Ageing, and Health Research in Motion – community based Physical Activity Research and Health Promotion Initiatives.

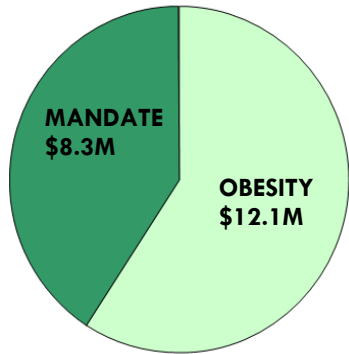
The 2007 CSEP conference will be in London ON, November 14-17th and the 2007 SCAPPS conference will be in Windsor ON, November 7-10th.

INMD IS EVALUATING THE OBESITY STRATEGIC INITIATIVE

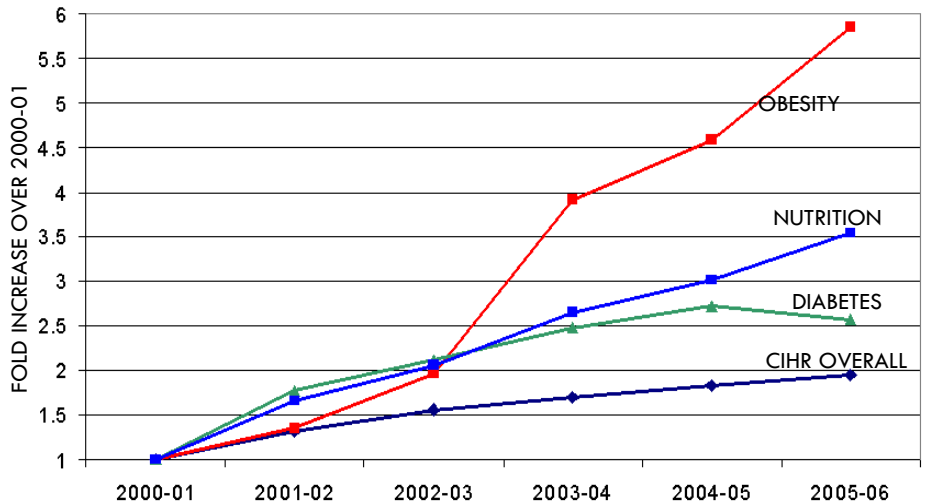
Researchers who have received CIHR and/or INMD funding please take note that you will soon be asked to participate in a web-based survey. INMD and the CIHR Evaluation portfolio are working on this important evaluation tool as part of a broader project measuring the impact we have had on the obesity research environment. The survey has been designed to measure research contributions and successes within this strategic area. The findings will also enable us to improve future funding initiatives. Your help will be greatly appreciated.

SNAPSHOTS OF INMD OBESITY FUNDING

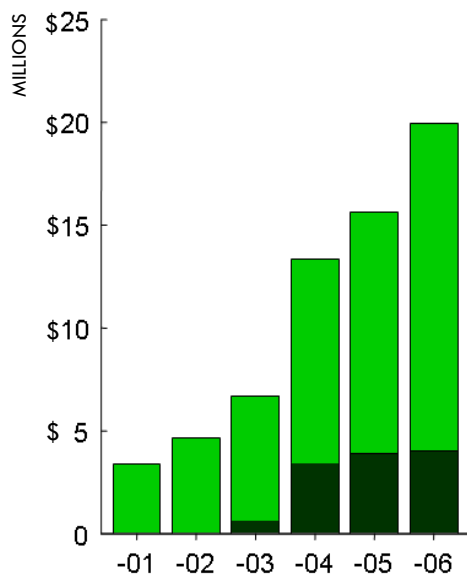
Part 1 of our multi-part look at INMD funding patterns



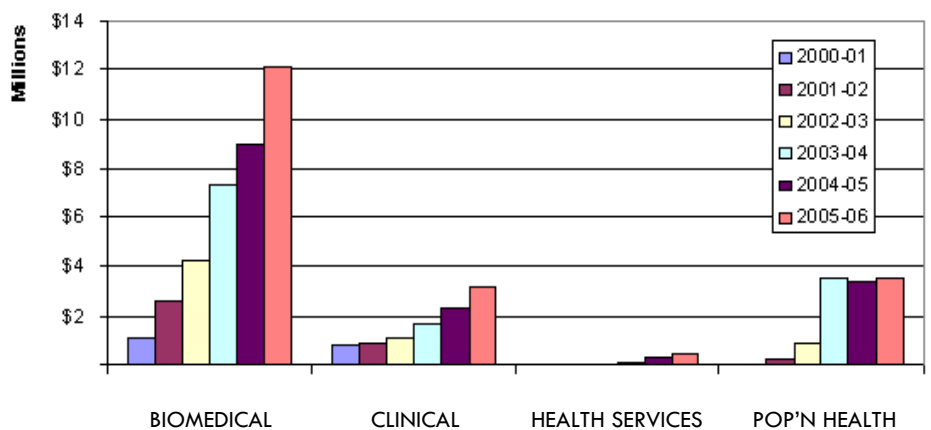
Since 2001, INMD has had a strategic focus on obesity and healthy body weights. Even with this sole strategic priority other areas of our mandate — including liver, kidney, gastrointestinal system, diabetes, metabolism and endocrinology— have received significant strategic dollars through INMD investments in partnership opportunities. The Institute spent \$8.3M (or 41%) of its strategic budget outside of the realm of obesity and healthy body weight.



Obesity funding rates have increased faster than CIHR's overall budget, as well as, all other areas of the INMD mandate (only 2 other areas are illustrated for the sake of clarity). The total amount of funding going to obesity was \$19.9M in 2005-06 while nutrition was \$46.3M and diabetes was \$30.8M.



While INMD's focus on obesity has helped grow CIHR's investment, there has also been a significant increase in obesity research funding across funding programs. The dark green bars represent INMD's contribution while the lighter green bars are funds contributed by the rest of CIHR.



This graph depicts the breakdown of CIHR dollars spent on obesity research since 2000-01. Research theme classifications were specified by the grant recipients. Key points include:

- Biomedical research has consistently received the highest level of funding and funding levels for this area continue to rise faster than the other areas.
- Population Health received a big boost in funding in 2003-04 but has not shown appreciable growth in the last 3 years.
- Consistent with other analyses done at CIHR in other research domains, Health Services and Systems research has been funded at a much lower rate than other areas.

RESEARCHERS WE FUND

Dr. Gary Goldfield: Using TV viewing to motivate activity in children

Can we use TV viewing as an incentive to motivate children to engage in more physical activity? It might sound risky, but it can be very effective, Ottawa researcher Dr. Gary Goldfield has shown. In a recent Pediatrics paper, he describes the success of this approach.

His study recruited 14 overweight or obese children aged eight to 12, and linked the time they were allowed to spend watching television or playing video games with the amount of physical activity they had logged in a previous week. The type of activity was left to the children to decide, and was recorded with accelerometers. A control group of 16 children were monitored for activity and screen time, but had no restriction on screen time.

Change in behaviour in the intervention group was impressive. The mean daily activity levels increased by 65% compared to 16% in the control group, and screen time decreased by almost two hours a day, compared to an increase of about 15 minutes.

The study was a variation on an earlier intervention introduced by one of Goldfield’s mentors, in which people rode stationary bicycles to generate power to keep a television on. Goldfield adapted the concept to have greater appeal to children.

“Kids don’t really like riding stationary bikes so we felt that wasn’t very sustainable for them, but if we could figure out a way that they could get activity in ways that they found enjoyable and interesting and fun, perhaps then they would be more likely to increase their physical activity and fitness.”

Another important result was that although the caloric intake of the children in the intervention group did not change, weight remained steady as height increased, allowing a slight (non-statistical) decrease in body mass index (BMI). This compared to a slight increase in BMI in the control group, which is a normal phenomenon as children age. Although these results could have been due to an increase in physical activity in the intervention group, Goldfield says an examination of sedentary behaviour and diet showed this not to be the case.

“When they reduced TV time, they weren’t eating as much snack food,” he explains. “A lot of eating is habitual, so if we eat every night in front of the TV, the TV becomes a cue to eat, and typically children are not eating carrot sticks and apples and oranges, they’re eating snack food. In fact he notes,

“Reduced TV viewing was a better predictor of reduced BMI than was increased physical activity.”

Another outcome was that children who had to earn screen time were so highly motivated that they did exercise, rather than substitute other sedentary behaviours such as reading or listening to music.

Explains Goldfield, “There have been several studies that show that overweight children do find sedentary activities more rewarding, and they find TV and video games particularly rewarding. We’re not sure if it’s learned, or if there’s a biological component.

“We do know though why they find physical activity less rewarding. It’s more uncomfortable. They’re carrying around extra weight, and they often have a hard time keeping up to their peers, so they’re likely to feel bad or discouraged.”

The study also showed that the reward value children assigned to screen time did not change.

“We were sort of concerned that it might,” Goldfield admits. “Some data support theory that when you restrict something that’s enjoyable to children, like TV, then they find it more rewarding and want it more. But the data suggested that their liking for television didn’t change.

“We were hoping to increase their enjoyment of physical activity, but that didn’t change either, maybe in part because eight weeks is just too short a study period to facilitate a lifestyle change.”

Goldfield’s work is leading to more studies. He would like to know if results can be generalized to other age groups, whether interventions of this sort would continue to be effective over a longer time period, and whether eventually physical activity could become rewarding itself.

Goldfield has a diverse background that includes experimental and clinical psychology, human kinetics, and pediatrics. He is affiliated with Children’s Hospital of Eastern Ontario, the University of Ottawa, and Carleton University. During the past five years he has received several CIHR awards to investigate methods for increasing physical activity in obese children, including resistance training, and has also been funded under INMD’s strategic initiative to test the effects of a drug with potential to cause weight loss.



Activity levels can increase when linked to screen time

“[AN] IMPORTANT RESULT WAS THAT ALTHOUGH THE CALORIC INTAKE OF THE CHILDREN IN THE INTERVENTION GROUP DID NOT CHANGE, WEIGHT REMAINED STEADY AS HEIGHT INCREASED”



50 PEOPLE FROM ACROSS CANADA MET TO WORK TOWARDS A COMMON UNDERSTANDING OF POPULATION HEALTH INTERVENTION RESEARCH AND TO COMMIT TO MOVING THE INITIATIVE FORWARD

THE POPULATION HEALTH INTERVENTION RESEARCH INITIATIVE FOR CANADA

The Population Health Intervention Research Initiative for Canada (PHIRIC) is a ten-year initiative that aims to build capacity in population health intervention research and its quantity, quality and use by policy makers and practitioners. This means increasing the profile of this type of research, creating a supportive environment for it in Canada, and bringing cultures together - different working cultures, as well as researchers, practitioners and policy makers. At CIHR, PHIRIC is strongly supported by the Institute of Population and Public Health (IPPH) and INMD.

September 2006, marked the first meeting of PHIRIC. Over two days in the beautiful town of Banff, 50 people from across Canada met to work towards a common understanding of population health intervention research and to commit to moving the initiative forward, on behalf of and with, the population and public health community in Canada.

In a feature interview of the IPPH *Spotlight on Research* (available at www.cihr-irsc.gc.ca/e/33503.html), the co-chairs of PHIRIC, Penny Hawe and Stephen Samis, explain that producing knowledge about population and community-level programs and policies that have the potential to improve health is crucial if we want to capitalize on many natural experiments and policy and program changes already unfolding across Canada. The need for such research is well established, but barriers such as insufficient financial and human resource investments, and an inability to align research efforts with actual policies, programs and practices on the ground has worked against a "healthy" developmental approach to intervention research capacity in Canada.

This news item was provided by the CIHR Institute of Population and Public Health.

CANADIAN OBESITY NETWORK LAUNCHES ONLINE TOOL

The **Canadian Obesity Network (CON)**

has launched "Online Best Evidence Service In Tackling Obesity Plus

(OBESITY+)", a new knowledge tool for

health providers with an interest in obesity. OBESITY+ will be based on the

innovative McMaster Online Rating of

Evidence (MORE) service, as well as the

latest research on information retrieval

conducted at the Health Information Re-

search Unit (HIRU) at McMaster Univer-

sity. OBESITY+ will provide CON mem-

bers with the latest best and most rele-

vant evidence for clinical practice on the

causes, course, diagnosis, prevention,

and treatment of obesity and its related

metabolic and mechanical complications.

For more information, visit

plus.mcmaster.ca/obesity

Call for papers on population health intervention research...

The International Journal of Public Health has put out a call for papers on "population health intervention research." The deadline for submissions is December 31, 2007. Manuscripts can be submitted via electronic mail to the Editorial Office at <ijph@ispm.unibe.ch> – please state that your submission refers to this call.



APPLIED COMPUTATIONAL GENETICS

Course offered by Genome Canada and Genome Alberta

Genome Canada and Genome Alberta, through their Bioinformatics Platform, is offering a course in Applied Computational Genomics, to empower bioinformatics/biology researchers and students. The week-long, hands-on course outlines tried-and-proven approaches as well as new developments.

The next course is scheduled for July 25-31, 2007, at the University of Alberta in Edmonton.

The course will assist researchers and students to increase their efficiency in problem solving by introducing them to the tools and services of the Bioinformatics Platform. After the course, attendees will have free internet access to all the Bioinformatics Platform tools and databases used in the course.

For more information visit www.gcbioinformatics.ca/training, or email training@gcbioinformatics.ca.

FUNDING OPPORTUNITIES

Operating Grant: Intervention Research (Healthy Living and Chronic Disease Preven- MORE: www.cihr.ca/e/32835.html	Letter of Intent: Full:	ANYTIME ANYTIME
Fellowship - Operating Fellowship: Industry Partnered (2006-2007) MORE: www.cihr.ca/e/31687.html	Letter of Intent: Full:	2007-09-01 2007-10-01
Graduate Training Award - Master's (2006-2007) MORE: www.cihr.ca/e/24190.html	Letter of Intent: Full:	NA 2008-02-01
Graduate Training Award - Doctoral (2006-2007) MORE: www.cihr.ca/e/32302.html	Letter of Intent: Full:	NA 2007-10-15
New Investigator Salary Award (2006-2007) MORE: www.cihr.ca/e/22372.html	Letter of Intent: Full:	2007-08-15 2007-09-15
New Investigator Salary Award: Industry Partnered (2006-2007) MORE: www.cihr.ca/e/31706.html	Letter of Intent: Full:	2007-08-15 2007-09-15
CIHR President's Fund MORE: www.cihr.ca/e/28109.html	Letter of Intent: Full:	NA ANYTIME
Randomized Controlled Trials MORE: www.cihr.ca/e/22388.html	Letter of Intent: Full:	2007-08-01 2007-09-01
Randomized Controlled Trials: Industry Partnered MORE: www.cihr.ca/e/22494.html	Letter of Intent: Full:	2007-08-01 2007-09-01

Regularly visit the CIHR website at www.cihr.ca/e/779.html for a complete and updated list of RFAs, priority announcements and other funding opportunities.

EVENTS

Canadian Association for Health Services and Policy Research Conference 2007 WHERE: Toronto, ON MORE: www.cahspr.ca/default1.asp	June 12-14, 2007
12th World Congress on Clinical Nutrition WHERE: Edmonton, AB MORE: www.afns.ualberta.ca/hosted/icnutrition	June 17-20, 2007
Canadian Nutrition Congress WHERE: Winnipeg, MB MORE: umanitoba.ca/outreach/conferences/cnc2007	June 18-21, 2007
American Diabetes Association - 67th Scientific Sessions WHERE: Chicago, IL MORE: scientificsessions.diabetes.org/index.cfm	June 22-26, 2007
International Conference on Physical Activity and Obesity in Children WHERE: Toronto, ON MORE: www.obesityconference.ca/	June 24-27, 2007
Assessment and Action for Healthy Settings: 2nd Atlantic Networks for Prevention Research Conference WHERE: St. John's, NL MORE: www.med.mun.ca/anpr2007/pages/welcomeANPR.htm	July 4-6, 2007
17th European Childhood Obesity Group Meeting (ECOG 2007) WHERE: Athens, Greece MORE: www.childhoodobesity.net	July 5-7, 2007
10th European Nutrition Conference WHERE: Paris, France MORE: www.fens2007.org	July 10-13, 2007
43rd Annual Meeting of the European Association for the Study of Diabetes WHERE: Amsterdam, The Netherlands MORE: www.eurocongress.com/easd	September 17-21, 2007
NAASO 2007 Annual Scientific Meeting WHERE: New Orleans, Louisiana MORE: www.naaso.org/annualmeeting07/2007_annual_meeting.asp	October 20-24, 2007
11th Annual CDA/CSEM Professional Conference and Annual Meetings WHERE: Vancouver, BC MORE: www.diabetes.ca/Section_Professionals/profconference.asp	October 24-27, 2007
1st International Conference on Advanced Technologies and Treatments for Diabetes (ATTD) WHERE: Prague, Czech Republic MORE: www.kenes.com/attd	February 27- March 1, 2008

For a complete list of upcoming events, please visit the INMD website at www.cihr.ca/e/13532.html