# Grey Matters

NEWSLETTER OF THE CIHR INSTITUTE OF AGING

MARCH 2007

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## INSTITUTE OF AGING

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shops

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The inaugural issue of *Grey Matters* was well received in the Fall of 2006 and we thank those who sent feedback and those members of the research community who were prompted by the newsletter to send updates on the outcomes and findings of their CIHR-funded research on aging. We very much welcome your response and in-put.

In this issue, we continue to celebrate some of the outstanding researchers and research in aging in Canada, to report on recent activities, and to announce some of the Institute's plans for the coming months.

We are pleased to announce the inauguration of the Travel Grants Program to assist trainees in research on aging to participate in academic meetings. Also, based on the success of our first Summer Program in Aging (SPA 2006) held in Quebec last June, we are now accepting applications for the SPA 2007 to be held at Harrison Hot Springs in British Columbia, June 4-8.

The Institute continues to advance issues of aging on the national and international agendas of governments and funding agencies. In December 2006, I had the opportunity to make a presentation to the Special Senate Committee on Aging, chaired by Senator Sharon Carstairs, on the topic of "A Focus on Aging from Cell to Society: The Research Agenda of the CIHR Institute of Aging". On February 8<sup>th</sup>, CIHR President Alan Bernstein and I met with James Maunder, Senior Policy Advisor to the Secretary

of State for Seniors. At Launch Conference of the New Dynamics of Re-Ageing search Programme in November 2006, in London, U.K., I pleased was



to have the opportunity to speak on behalf of the Public Health Agency of Canada and the Minister of Health on the topic of the CIHR model of research on aging and on the link between knowledge creation through research and its application through policy and practice in aging.

We will soon be releasing "The Future is AGING", the Institute's Strategic Plan 2007-2012; this document will provide the blueprint for the Institute of Aging's strategic initiatives and activities over the next few years. This document is the product of much deliberation by the members of the Institute of Aging's Advisory Board and of the national on-line consultation conducted with researchers and stakeholders just over a year ago. Again, we thank you for your input to that process.

Anne Martin-Matthaws

## Café Scientifique

The first of CIHR's new government outreach initiatives, the 'Café Scientifique', held at Ottawa's Parliament Pub on October 18, focused on Insights into the Future of Aging. Dr. Anne Martin-Matthews, along with aging experts, Drs. Max Cynader, Geoff Fernie, Hélène Payette and Allison Sekuler, spoke with Members of Parliament and the public on current Canadian health research into our aging bodies, our aging brains, and the environment in which we're growing old.

Kevin von Appen from the Ontario Science Centre demonstrated the Amazing Aging Machine $^{\text{TM}}$  which uses aging software to digitally age people to show how they will look when they are old.



Dr. Anne Martin-Matthews, Dr. Allison Sekuler, Kevin von Appen, Dr. Hélène Payette, Dr. Max Cynader and Gary Catlin

## IA Canadian Research Forum on Aging

The 2006 Canadian Research Forum on Aging was held in conjunction with the Canadian Association on Gerontology (CAG) - Annual Symposium and Educational Meeting in Quebec City, October 26-28, 2006. Two special joint CAG/CIHR Institute of Aging symposia were featured:

- Studying Adult Development and Aging: Planning for the Canadian Longitudinal Study on Aging (CLSA): Parminder Raina (Chair), Susan Kirkland, Holy Tuokko, Hélène Payette, François Béland, Howard Bergman.
- Innovative approaches to Optimize Balance and Mobility in Older Adults: Brian E. Maki (Chair), Barbara A. Liu, Stephen D. Perry, William E. McIlroy, Geoff R. Fernie.

In keeping with our focus on building capacity in aging research, the forum also included a CIHR Grant Crafting Workshop, a Breakfast Meeting



Dr. Anne Martin-Matthews with student poster competition winners, Patricia Ebert and Stephanie Brown

for Directors of Canadian Research on Aging Centres, announcement of the CIHR IA Special Recognition Prize Awards, and the CIHR IA Student Poster Competition winners.

The next Annual CAG Conference will be held in Calgary, Alberta, November 1-3, 2007. The deadline for abstract submissions is March 30, 2007.

## Research News: A Better Sense of Sole and Balance in Later Life

For the past 15 years, CIHR-funded researcher **Dr. Stephen Perry** has been studying how to keep seniors on their feet. Now his scientific insights could save your life. He's the coinventor of a new shoe insole that improves balance and helps avoid the most common cause of injury among seniors — falls.

"The Sole Sensor is really a quality of life device," says the Wilfrid Laurier University associate professor of kinesiology. "We're trying to help seniors enjoy life, to give them that little extra edge so that they feel confident about stepping out into the world, rather than staying at home afraid of a fall."

Thousands of pressure sensors on the soles of our feet provide the information that enables us to balance our body weight. As we age, however, we lose sole sensitivity. We develop hard calluses, lose foot nerve function. From a sensory perspective, it's the equivalent of a slow loss of vision. The result is that we can't balance as well and are more prone to falls, the main cause of hospitalisation among seniors. Four-inten seniors hospitalised for fall-related injuries, such as a hip fracture, die within six months.

The Sole Sensor insole is like eye glasses for the feet, it improves the sole's sensory perception. The patented insole, developed from research funded by the CIHR, extends from the base of

the toes to the heel. Its key component is a thin ridge, about the height a loonie is thick, which extends around the side and back edges of the insole.



Dr. Stephen Perry

"This ridge acts for

walkers like the yellow line on the side of the road does for drivers. When you're balanced you don't feel it. But when you're off-balance you sense the ridge and sub-consciously know you need to re-align your weight," says Dr. Perry, who co-invented the Sole Sensor with Dr. Brian Maki of Toronto's Sunnybrook Health Sciences Centre, Dr. William McIlroy of the University of Waterloo and Dr. Geoff Fernie of the Toronto Rehabilitation Institute.

In recent clinical trials the Sole Sensor significantly improved seniors' stability. The twenty adults, 65 to 75 years of age who wore Sole Sensors for 12 weeks also had half the falls in this period as did another group of twenty seniors without the insoles.

The Sole Sensor is made by Ontario-based Hart Mobility (www.hartmobility.com).

#### **SEND US YOUR NEWS**

The Institute of Aging would like to hear from you. Send us an e-mail at aging@interchange.ubc.ca if you have any research news or news-letter comments that you would like to share.

# Research News: Lifelong use of two languages can help delay the onset of dementia symptoms

There has been much interest and growing scientific literature examining how lifestyle factors such as physical activity, education and social engagement may help build "cognitive reserve" in later years of life.

Now scientists with the Rotman Research Institute at the Baycrest Research Centre for Aging and the Brain have found the first evidence that another lifestyle factor, bilingualism, may help delay dementia symptoms.

"We are pretty dazzled by the results," says principal investigator **Ellen Bialystok, Ph.D.**, whose research team at Baycrest included psychologist Dr. Fergus Craik, a world authority on age-related changes in memory processes, and neurologist Dr. Morris Freedman, an eminent authority on understanding the mechanisms underlying cognitive impairment due to diseases such as Alzheimer's. Dr. Bialystok is also a professor of psychology at York University.

Researchers examined the diagnostic records of 184 patients who came to Baycrest's Sam and Ida Ross Memory Clinic between 2002 and 2005 with cognitive complaints. Of that group, 91 were monolingual and 93 were bilingual.



The researchers determined that the mean age of onset of dementia symptoms in

Dr. Ellen Bialystok

the monolingual group was 71.4 years, while the bilingual group was 75.5 years. This difference remained even after considering the possible effect of cultural differences, immigration, formal education, employment and even gender as influencers in the results.

"There are no pharmacological interventions that are this dramatic" in delaying symptoms, says Dr. Freedman, who is Head of the Division of Neurology, and Director of the Memory Clinic at Baycrest.

The study, funded by CIHR, is published in the February 2007 issue of Neuropsychologia (Vol.45, No.2).

## Did you know?

Only 12 per cent of adults over age 65 have sufficient health literacy scores to understand directions such as "take two tablets twice daily for seven days" This, says CIHR-funded researcher Irving Rootman, is a "shocking" number, given that 90% of seniors take at least one prescription drug, and many take more. Health information needs to be put in plain language. A recent study in a Montreal clinic found the average reading level of patient education materials was Grade 11.5, "higher than the recommended reading level of Grade 7 or less".

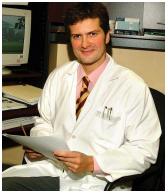
### Rising Stars: CIHR-IA Age Plus Award winner

The CIHR Institute of Aging Age Plus Award recognizes excellence in research on aging carried out in Canada by graduate and postdoctoral students and clinical residents from all disciplines, working in the field of aging. It is awarded to the author of a published, scientific article on aging.

The latest winner of the prize is **Dr. Manuel Montero Odasso**, who recently moved to the University of Western Ontario after completing his training at McGill University. The prize was awarded for Dr. Odasso's article entitled, "Gait velocity as a single predictor of adverse events in healthy seniors aged 75 years and older" in *J Gerontol A Biol Sci Med Sci* 2005; 60(10):1304-1309.

Human life expectancy has increased in recent decades; however, disability-free life expectancy has not increased proportionately. Mobility problems are one of the most common causes of disability, and despite the myriad of mobility tests that exist, there has been a gap in translating geriatric knowledge into clinical practice for detecting and preventing mobility impairment.

One strategy for decreasing this gap is to develop reliable instruments for assessmentscreening, and Dr. Odasso has made progress in this area. He has shown that gait velocity measurement detect early stages



Dr. Manuel Montero Odasso

of vulnerability to mobility impairment in healthy seniors. One day, the result from a "gait velocity test" may be used as a "vital sign" in clinical practice. These tests are simple to conduct, reliable and accurately predict future adverse outcomes. Once vulnerability is identified, proper interventions can be provided to increase the quality of life of seniors at risk.

For more information and to learn how to apply for the Age Plus Award, visit the IA web site at www.cihr-irsc.gc.ca/e/26987.html.

## IA support for NeuroScience Canada

In 2006, NeuroScience Canada raised \$1,281,873, bringing their National Brain Repair Fund Campaign total to \$11,471,768 of their \$11.5-million goal. The campaign total includes a Memorandum Of Understanding that was signed last December with the CIHR Institute of Aging, to provide \$500,000 towards a team selected in the second Brain Repair Program competition, and a \$350,000 commitment from the Ontario Neurotrauma Foundation, also for the second competition. These partnerships were a major boost to the campaign, and

also to the NeuroScience Canada research program, as they reinforce the value of the model that has been developed for supporting excellent and innovative Canadian neuroscience research.

The Institute of Aging will target its support to at least one of the teams selected for funding if it addresses an area aligned with the goals/mandate/research priorities of the IA, including the advancement of knowledge in the area of Geriatrics and Cognitive Impairment in Aging, including the functional consequences of disease.

## NRC Task Group on building code modifications

The National Research Council of Canada has set up a task group on stairs, ramps, handrails and guards to make recommendations regarding modifications to the building codes. As a first step, this group is assembling key research findings that may inform recommendations they will be making. The task group is interested in both published and unpublished research in all relevant areas, but in particular:

- lighting requirements for stairs
- the slope of ramps that can be safely and easily negotiated by someone who has difficulty walking and may require an assistive device such as a cane
- data on the incidence of falls on ramps (of varying slopes), the incidence of falls on stairs (of varying dimensions), and the incidence of falls on short sets of stairs (1, 2 or 3 steps) versus longer sets of stairs (indoor or outdoor)



whether seniors (and other age groups)
can more readily navigate the stairs in
their own homes (in comparison with
public buildings) because they are familiar
with these stairs.

If you have research reports that you think may be of relevance to the committee, please contact Dr. Nancy Edwards at nedwards@uottawa.ca.

### **KUDOS: ORDER OF CANADA**



Dr. Dorothy Pringle

Congratulations to Dr. Dorothy Pringle,
Past Chair and current member of the IA
Institute Advisory Board, who has been
appointed an Officer of the Order of
Canada in recognition of her outstanding
achievements and service in the fields of
health care and education. The Order of
Canada, established in 1967, is Canada's
highest honour for lifetime achievement.

## Upcoming Meetings

The Institute of Aging is proud to be involved in the following upcoming meetings:

## 2007 ANNUAL GENERAL & SCIENTIFIC MEETING OF THE CANADIAN GERIATRICS SOCIETY (CGS)

The 2007 meeting will be held in the beautiful Rocky Mountain resort of Banff, Alberta, April 19-21.

The Institute of Aging offers the Réjean Hébert Prize in Geriatric Research, awarded for the best scientific presentation by a Medical Resident in a core (or primary) residency training program at the CGS Annual Scientific Meeting. The winner is selected in partnership with CGS.

MORE: www.canadiangeriatrics.com/index.html

## FICCDAT (FESTIVAL OF INTERNATIONAL CONFERENCES ON DISABILITY, AGING AND TECHNOLOGY)

This international conference to be held in Toronto during Seniors' Month, June 16-19, 2007 will bring together five important and different conferences all focused on enhancing the lives of seniors, persons with disabilities and their family caregivers.

- Growing Older with a Disability
- The 2nd International Conference on Technology and Aging (ICTA)
- Advances in Neurorehabilitation
- Caregivers: Essential Partners in Care
- 30th Canadian Medical and Biological Engineering Conference: Improving Medical Device Usability

Internationally recognized experts in gerontology, technology, neurorehabilitation caregiving and medical device engineering will share their knowledge and experience.

MORE: www.ficdat.ca/

## TRANSED 2007 (11TH INTERNATIONAL CONFERENCE ON MOBILITY AND TRANSPORT FOR ELDERLY AND DISABLED PERSONS)

The conference will review advances in research, profile international breakthroughs and explore perspectives for technological innovations in order to respond to the mobility challenges of an aging population and of persons with disabilities, as part of an inclusive society.

The Institute of Aging will support a workshop on "Screening and assessment innovations for drivers with MCI (mild cognitive impairment)/Dementia: Addressing issues and controversies", as well as sessions related to IA's focus on Mobility in Aging.

MORE: www.tc.gc.ca/pol/en/transed2007/home.htm







## Funding Opportunities

## RAPID (RESEARCH TO ACTION PROGRAM IN DEMENTIA): KNOWLEDGE TRANSLATION NETWORK IN ALZHEIMER AND DEMENTIA

The purpose of this Request for Applications (RFA) is to facilitate and accelerate the translation of research in Alzheimer Disease and Dementia through the networking of researchers and relevant knowledge user communities and the building of capacity in these communities.

Letter of intent due: April 1, 2007

MORE: www.cihr-irsc.gc.ca/e/32865.html

#### SEED GRANT: MOBILITY AND AGING

The purpose of this Request for Applications (RFA) is to provide opportunities for the support of planning and/or development activities that normally precede complex, multi-stakeholder and/or team research program across the range of intrinsic and extrinsic challenges (from biological to environmental) associated with the Strategic Initiative Announcement - Mobility in Aging (details at http://www.cihr-irsc.gc.ca/e/29994.html).

Registration deadline: April 1, 2007

MORE: www.cihr-irsc.gc.ca/e/32782.html

### THE BETTY HAVENS AWARD FOR KNOWLEDGE TRANSLATION IN AGING

Nominated individuals, teams or organizations will be assessed on innovative and significant achievements in knowledge translation activities at the local or regional level relevant to any area of health research.

Application deadline: May 1, 2007

MORE: www.cihr-irsc.gc.ca/e/30156.html

### RESEARCH ON AGING ADVANCEMENT PROGRAM (RAAP)

Support for activities such as workshops, consensus meetings, network and partnership development, and other activities intended explicitly for the advancement of Canadian aging-related health research and its translation.

Applications are accepted 3 times a year. Next application deadline: May 1, 2007.

MORE: www.cihr-irsc.gc.ca/e/4105.html

## Funding Decisions

### Planning and Development Grant - Mobility in Aging Competition

The following researchers received funding under this competition:

- Dr. Teresa Liu-Ambrose and Dr. Todd C. Handy, University of British Columbia: Is a recent history of multiple falls an early indication of cognitive dysfunction? An observational study of older fallers and non-fallers
- Dr. François Prince, Université de Montréal: Recovery after hip arthroplasty: Effects of physical exercise on gait pattern
- Dr. John Spence, University of Alberta: Determinants of physical inactivity among older adults in rural Atlantic Canada

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Complete information on IA funding decisions can be seen on the IA website at www.cihr-irsc.gc.ca/e/25845.html

## Student and Trainee Opportunities

### **SUMMER PROGRAM IN AGING (SPA) 2007**

The annual Institute of Aging Summer Program in Aging (SPA) offers a four-day intensive training and networking experience to students and post-doctoral fellows involved in aging research that crosses disciplines, sectors, institutions and geography and that addresses one or more of IA's research priorities. SPA 2007 is being hosted in partnership with the British Columbia Network on Aging Research and will take place June 4-7 in British Columbia.

Application deadline: March 15, 2007

MORE: www.cihr-irsc.gc.ca/e/33047.html

## NIH-NIA/CIHR-IA POST DOCTORAL FELLOWSHIP PROGRAM: TRAINING IN RESEARCH ON AGING IN CANADA (TRAC)

Open to citizens or non-citizen nationals of the United States, with a PhD or equivalent in a health science field, who wish to join multidisciplinary research teams in research on aging in Canada. Applications are accepted 3 times a year.

Next application deadline: April 5, 200

MORE: www.cihr-irsc.gc.ca/e/31570.html#2

### **AGE PLUS AWARD**

The Institute of Aging Age Plus Award recognizes excellence in research on aging carried out in Canada. It is awarded to the author of a published, scientific article on aging. The Age Plus Award is aimed at graduate and postdoctoral students and clinical residents from all disciplines, working in the field of aging.



MORE: www.cihr-irsc.gc.ca/e/26987.html

#### MORE INFORMATION

For complete information on all funding IA funding opportunities, visit the IA website at www.cihr-irsc.gc.ca/e/26838.html

## Conferences and Workshops

FEBRUARY 8-10

 $2^{nd}$  CSSAM/ISSAM North American Congress on The Aging Male

Montreal, QC

www.issam.ch/index.asp

**MARCH 21-23** 

The Greying Nation: A conference on issues of aging Edmonton, AB

www.capitalhealth.ca/NewsAndEvents/

ConferenceAndEvents/

The\_Greying\_Nation\_Conference.htm

**MARCH 30-31** 

Edmonton Aging Symposium: Repairing the Damage Edmonton, AB

www.edmontonagingsymposium.com

APRIL 19-21

2007 Annual General & Scientific Meeting of the Canadian Geriatrics Society

Banff, AB

www.canadiangeriatrics.com/index.html

**MAY 2-5** 

Canadian Gerontological Nurses Association 14th National Conference : The Vitality of Aging: Embracing the Spirit Winnipeg, MB

cgna.net/CGNAConference2007/tabid/83/

Default.aspx

MAY 4-5

7<sup>th</sup> National Workshop for Driver Rehabilitation Specialists Ottawa, ON

www.ottawahospital.on.ca/media/events/ DriverRehab-e.pdf

JUNE 11-15

The 19th IUHPE World Conference on Health Promotion and Health Education

Vancouver, BC

www.iuhpeconference.org

**JUNE 14-15** 

2007 RehabNet Conference 'Achieving Patient Safety, Respecting Patients' Choices'

Toronto, ON

www.torontorehab.com/education/rehabnet

**JUNE 16-19** 

FICCDAT (Festival of International Conferences on Disability, Aging and Technology)

Toronto, ON

www.ficdat.ca

**JUNE 18-21** 

TRANSED 2007 (11th International Conference on Mobility and Transport for Elderly and Disabled Persons) Montreal, QC

www.tc.gc.ca/pol/en/transed2007/home.htm

**JULY 5-8** 

16th European Congress of IAGG (International Association of Gerontology and Geriatrics)

St. Petersburg, Russia

www.onlinereg.ru/gerontology

**SEPTEMBER 3-6** 

8th European Sociological Association Conference: Conflict, Citizenship and Civil Society

Glasgow, Scotland

www.esa8thconference.com

**SEPTEMBER 24-25** 

2nd Annual Conference of the Canadian Coalition for Seniors' Mental Health

Toronto, ON

www.ccsmh.ca/en/about/whatsHappening.cfm

**OCTOBER 10-13** 

23rd International conference of Alzheimer's Disease: New Perspectives, New Hope

Caracas, Venezuela

www.adi2007.org

**OCTOBER 14-18** 

13th International Psychogeriatric Association Congress Osaka, Japan

www.ipa-online.net/ipaonlinev4/main/meetings/2007osaka/meetings\_2007osaka.html

**OCTOBER 18-20** 

4th Canadian Colloquium on Dementia

Vancouver, BC

www.ccd2007.ca

**NOVEMBER 1-3** 

CAG (Canadian Association on Gerontology) Annual Scientific Meeting 2007

Calgary, AB

Abstract submission deadline: March 30, 2007

www.cagacg.ca/conferences/400\_e.php

**NOVEMBER 16-20** 

Gerontological Society of America 60th Annual Scientific Meeting

San Francisco, CA

Abstract submission deadline: March 15, 2007

www.geron.org/default.asp