

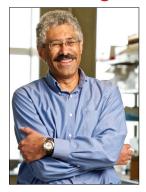


IMHA On the Move!

CIHR Institute of Musculoskeletal Health and Arthritis

May 2015

Message from the Scientific Director



As we finally welcome spring, soon to become summer. CIHR-IMHA continues to engage with many diverse communities as the Institute moves ahead with its newly established Strategic Plan. The calendar fills up quickly! Important highlights to note in the month of May alone include North American Occupational Safety and Health Week, which was May 3 to 8. CIHR-IMHA is currently partnered with the

CIHR Institutes of Aging, Gender and Health, and the Institute for Work and Health to host the CIHR Summer Program in Aging focusing this year on "More Years, Better Lives: The Health, Wellness and Participation of Older Adults in the World of Work." This year's program will take place June 1 to 5 at Osgoode Hall in Toronto.

World Lupus Day was May 10, and Fibromyalgia and Chronic Fatigue Syndrome National Awareness Day was May 12, reminders of the importance of supporting research and translation of knowledge regarding chronic diseases affecting the quality of life of many Canadians. CIHR-IMHA's James Lind Alliance: Adult Fibromyalgia Priority Setting Partnership is working towards identifying unanswered questions about the management of adult fibromyalgia from patient, caregiver and clinical perspectives, then prioritizing those questions that representatives of all these perspectives agree are the 10 topmost pressing to address.

I will be attending the EULAR Rheumatology Congress in Rome June 10 to 13, and I look forward to productive meetings with international partners to develop new initiatives of relevance to multiple countries. CIHR-IMHA recognizes the importance of international collaboration and partnership to further health research for the benefit of everyone.

With skin being one of CIHR-IMHA's areas of research focus, it is important to note the World Congress on Dermatology will be in Canada for the first time in its 23 years, happening June 8 to 13 in Vancouver.

A few last items of importance I wish to highlight to the IMHA community are as follows:

- With skin being one of IMHA's areas of research focus, it is important to note the World Congress on Dermatology will be in Canada for the first time in its 23 years, happening June 8 to 13 in Vancouver.
- In further recognition of rare conditions falling under CIHR-IMHA's areas of research focus, we include in this newsletter, a rare disease corner to raise awareness of new research and the need for new knowledge translation.
- For further news and updates on changes at CIHR please visit the Institutes Modernization page on the CIHR website.

As always, I encourage you to continue to submit any questions or comments to IMHA@cihr-irsc.gc.ca. Please also follow me on Twitter @HaniElgabalawy.

Sincerely,



Hani El-Gabalawy MD FRCPC Scientific Director CIHR Institute of Musculoskeletal Health and Arthritis

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Funding Opportunities



For a full listing of CIHR funding opportunities, please visit the ResearchNet website.

Program Name: Team Grant: Pathways Implementation Research Team – Component 2

Phase 2: Application Deadline: September 15, 2015 (Phase 1: Letter of Intent CLOSED)

Rare Diseases: Models & Mechanisms Network

Have you identified a new genetic disease or work on a genetic disease which would merit further research in a model organism? If so, please consult the Rare Diseases: Models and Mechanisms Network for funding and collaboration opportunities.

Changes to the CIHR Research Reporting System Report

CIHR would like to inform you of recent changes to the CIHR Research Reporting System (RRS) reports. The RRS is a tool that CIHR uses to collect vital information regarding the research outputs of grants funded by CIHR. Reporting on funded research enables CIHR to collate and evaluate information from multiple researchers, track the impacts of individual grants over a number of years, produce updates to show the impact of CIHR funding, and evaluate the effectiveness of its funding programs and strategies.

In response to feedback collected from the research community, CIHR has identified opportunities to streamline the RRS report in an effort to reduce burden on researchers while ensuring that the data captured aligns with CIHR's reporting requirements. The new report has fewer questions and is a shorter report compared to the previous version.

As a result, all RRS reports (both currently open and new RRS reports) were updated on April 9th 2015. Please note that those grant holders who currently have an open RRS report have been contacted directly by CIHR to discuss the impacts of this change. If you have any questions or concerns, please do not hesitate to contact info@cihr-irsc.gc.ca.

Keep Up With The News

In this age of social media, it is important for members of a health research community to be knowledgeable about their health topics in the news. At IMHA, we have been collecting news clips relevant to our areas of research focus. If you would like to receive a bi-monthly mail-out of these "Google Alerts," please email christine.mazur@umanitoba.ca.

Final Launch of the Knowledge Translation & Commercialization Funding Opportunities

The implementation of CIHR's new Open Suite of Programs and peer review processes includes a transition plan to gradually phase-out existing Open Knowledge Translation programs while phasing-in the two new funding schemes, the Project Scheme and Foundation Scheme. Therefore, the final launches of these programs will be on June 24th, 2015, as per the competitions below:

- Partnerships for Health System Improvement: 2015-2016
- Operating Grant- Knowledge to Action: 2015-2016
- Knowledge Synthesis Grant: Fall 2015
- Proof of Principle Phase I and II: Fall 2015
- Industry Partnered Collaborative Research: Fall 2015 Please refer to the specific Funding Opportunities for more details on the objectives and competition timelines.

Project Scheme – Partnered/Integrated Knowledge Translation (iKT) projects: Special consideration

One of the expectations of the Project Scheme is to support a diverse portfolio of health-related research and knowledge translation projects at any stage, from discovery to application, including commercialization. To support this expectation CIHR will establish a minimum threshold of funded knowledge translation and commercialization projects that include a partnered/iKT approach. More details can be found in Project Scheme: 2016 1st Live Pilot- Application Instructions.

Contact Information

Alison Bourgon, Manager Knowledge Translation Strategy Email: kt-ac@cihr-irsc.gc.ca

Partner News



Arthritis Alliance of Canada

The Arthritis Alliance of Canada's annual meeting will be held October 22-23, 2015 at the Delta Lodge at Kananaskis Hotel, Alberta.



Arthritis Consumer Experts

Please read the April edition of *Joint Health*, the monthly publication of

Arthritis Consumers Experts, which celebrates the life of Dr. Cy Frank, CIHR-IMHA's first Scientific Director. Dr. Frank, whom the community lost in March, was a well-loved and respected clinician, researcher, teacher, mentor and much more.

Arthritis Consumer Experts and the JointHealth™ family of education programs is offering a "SEB facts" Webinar. Subsequent entry biologics (SEBs) are a new class of medications entering the Canadian marketplace and consumers and patients living with autoimmune forms of arthritis and other diseases affecting the immune system need to learn about them from credible sources. To register, please complete the form including all fields marked with a * and click "submit".



Network for Canadian Oral Health Research

NCOHR's next Canadian dental student workshop, Schmoozing Your Way to a

Successful Scientific Career will take place Wednesday afternoon, July 29. Information about student workshops is on the NCOHR website.

Featured Research

PRECISION: Preventing complications from inflammatory skin, joint and bowel conditions

Dr. John Esdaile is the national Primary Investigator on one of the nine research teams that received grants under the CIHR Inflammation in Chronic Disease Signature Initiative in 2014. Representatives of the research teams attended an inaugural networking meeting in February, 2015 in Winnipeg, Manitoba, organized by IMHA and the CIHR Institute of Infection and Immunity (III). One of the meeting's objectives was to encourage collaboration among researchers studying different aspects of inflammation in chronic disease. At the meeting, Dr. Esdaile kindly took some time to discuss his team's project and share his thoughts on the collaborative process among health researchers. This is the first in a series of interviews with the Inflammation researchers.



A physician and researcher in Rheumatology at the University of British Columbia, Dr. John Esdaile is the Scientific Director of Arthritis Research Canada. His area of research interest is the study of clinical arthritis with a focus on applied research results, with a main objective of improving the lives of those living with arthritis. The goal of the current project, PRECISION: Preventing complications from inflammatory skin, joint and bowel conditions, is to examine a

number of types of arthritis as well as skin disease, psoriasis, and two types of bowel disease: Crohn's Disease and ulcerative colitis, since the researchers believe these disorders share some very common features. "We think all of these diseases share a number of complications," Dr. Esdaile explained, "that as we got better and better at controlling the acute problems of these diseases, we'd be left with chronic, low-grade, ongoing inflammation." These complications now eclipse the original problems that have become treatable with better therapies.

The complications include heart attacks, strokes, lung clots, hip fractures, diabetes, lung disease and hospitalized, serious infections. The PRECISION team will link such complications to the inflammation and look at how to intervene to eliminate and prevent them. "We have some evidence that we might be able to do that," said Dr. Esdaile, "and we are excited about the prospect of radically altering these bad outcomes."

The best way to approach the problem is by forming a multidisciplinary team Dr. Esdaile explained, because it was clear to the researchers that one view would not be enough. "We have physiotherapists, occupational therapists, rheumatologists. Biostatisticians are critical to answering some of these questions," he said. "Epidemiologists and health economists, all of whom are being brought together to focus on getting the answers."

A main concern of the team is knowledge translation, therefore specialists in that field are also part of the team. "If we did not have that team we would only be able to answer a tiny part of that question," said Dr. Esdaile.

Further, he expects the techniques the team develops will be widely applicable to many different chronic diseases and questions. "We are expecting the results to be of much greater value not just to the diseases we're studying but as a method, an approach to studying chronic disease in general," he said. Meeting and networking with other research teams is also very beneficial when working in a cross-cutting field such as inflammation in chronic disease. "I think it's a wonderful opportunity to cross fertilize, hear what other people are doing,"

he said of the Winnipeg networking meeting. "They can perhaps see as they develop their models how they could rapidly put them into practice."

Involving patients in research is another critical component to ensure successful research outcomes. "I think one of the interesting things about our research," he observed, "is that we've had patient involvement from day one."

Before applying for the grant, Dr. Esdaile's team first conducted a survey across Canada asking people living with inflammatory diseases what they thought were the important research questions. "The questions we are trying to answer," Dr. Esdaile explained, "are questions patients across Canada said, "this is what's really important to me." And that has made the project very exciting."



Cochrane Corner

Cochrane Reviews are an important part of knowledge translation. The Cochrane Collaboration works to disseminate knowledge to health research communities so as to benefit patients and the health care system as a whole.

Besides the Reviews, the Canadian Cochrane Centre has an enewsletter, Relay Cochrane! published three times a year, and a *Training and Events* enewsletter published twice a year.

Select Reviews from the Cochrane Bone, Joint and Muscle Trauma **Group on the CIHR-IMHA Cochrane web page:**

- *Interventions for treating fractures of the patella in adults (new; February 2015)
- *Surgical versus non-surgical interventions for treating patellar dislocation (new search for studies and content updated, conclusions not changed; February 2015)
- * Exercise for treating patellofemoral pain syndrome (new; January 2015)
- * Aspiration of the elbow joint for treating radial head fractures (new; November 2014)
- * Exercise for reducing fear of falling in older people living in the community (new; November 2014)
- * Surgical interventions for treating fractures of the olecranon in adults (new; November 2014)
- * Anabolic steroids for rehabilitation after hip fracture in older people (new; October 2014)
- * Surgical approaches for cervical spine facet dislocations in adults (new; October 2014)
- * Interventions for treating simple bone cysts in children (new; September 2014)
- * Intramedullary nails for extracapsular hip fractures in adults (new search for studies and content updated, conclusions changed; September 2014)

Research News

New Musculoskeletal Health study cautions use of whole-body vibration platforms

A new study, published in Arthritis & Rheumatology, from Western University shows that whole-body vibration platforms, which are used extensively in health clubs and rehabilitation clinics, may be causing significant damage to joint tissues. The findings by Cheryle Séguin, Matthew McCann and collaborators from the Western Cluster of Research Excellence in Musculoskeletal Health were published by Arthritis & Rheumatology.

Whole-body vibration platforms are used to treat a wide range of musculoskeletal disorders like osteoporosis, osteoarthritis and back pain while professional and amateur athletes employ vibration training machines to increase muscle strength. These platforms are also marketed to the general public as the 'no work workout' for weight loss.

Researchers Cheryle Séguin, Matthew McCann and collaborators from the Western Cluster of Research Excellence in Musculoskeletal Health Using used pre-clinical models, the study revealedand found significant negative effects of wholebody vibration on joint tissues. Examination of the knee joints after just four weeks of daily exposure to whole-body vibration revealed focal damage to the articular cartilage resembling osteoarthritis, as well as damage to the spine resembling disc degeneration.

This work was funded by the Natural Sciences and Engineering Research Council of Canada, Canadian Institutes of Health Research and the Arthritis Society. Infrastructure was provided in part by the Canada Foundation for Innovation-Leaders Opportunity Fund.

Meetings of Interest

28th Annual Canadian Student Health Research Forum June 2-4, 2015 University of Manitoba, Winnipeg, MB

23rd World Congress of Dermatology June 8-13, 2015 Vancouver, BC

EULAR Rome 2015 June 10-13, 2015 Rome, Italy

Canadian Physiotherapy Association National Congress June 18-21, 2015 Halifax, NS

12th Annual World Congress on Industrial Biotechnology July 19-22, 2015 Montreal, QC

Cochrane Collaboration Colloquium October 3-7, 2015 Vienna, Austria

4th International Conference on Orthopedics & Rheumatology

October 26-28, 2015 Baltimore, Maryland, USA

American College of Rheumatologists (ACR) Annual Meeting November 6-11, 2015 San Francisco, CA

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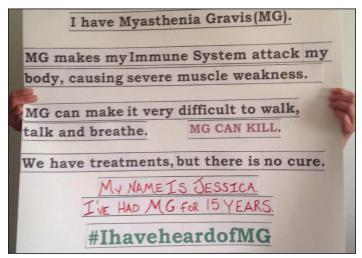
Rare Disease Corner

Patients living with rare illnesses can have different needs from healthier patients. Awareness of these conditions is a first step toward improving personalized care for patients with rare diseases.

Kienbock's disease – Research presented at the American Society for Surgery of the Hand Annual Meeting September 18-20, 2014 in Boston reported that this condition of avascular necrosis affecting wrist joints may progress to fragmentation within 6 months. More information about this disease is available on the National Institutes of Health website.

Sjögren's syndrome – A new study reported in Arthritis Research & Therapy found that patients with primary Sjögren's syndrome were as likely to have comorbidities such as atherosclerosis and lower bone mineral density as patients with rheumatoid arthritis, and be at more risk for other health conditions than healthy individuals. Another study published in Clinical and Experimental Rheumatology found that Ultrasonography helped with diagnostics and follow-up for primary Sjogren's syndrome.

Myasthenia Gravis – A social media campaign to raise awareness for this chronic autoimmune, neuromuscular disease causing weakness in voluntary muscles has been circulating the internet for the past few months. Please visit #IhaveheardofMG to learn more and share information about MG. More general information about MG is available from the Myasthenia Gravis Foundation of America.



One of many social media posts intended to raise public awareness about Myasthenia Gravis. Source: Twitter.

Contact Us

Be a part of the CIHR-IMHA community! Please send news and information and subscribe to our newsletter mailing list by emailing christine.mazur@ umanitoba.ca

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