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Canada

Institute of Musculoskeletal Health and Arthritis

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IMHA ON THE MOVE!

...Advancing the Science of Arthritis, Rehabilitation, Bone, Muscle, Skin and Oral Health

Greetings from the Scientific Director: Fostering Research Excellence

Dr. Cyril Frank
Scientific Director

When IMHA came into being four years ago, one of its primary objectives was to develop a strategy that would help CIHR create a strong, robust research environment. This was a considerable challenge; but one that we felt we could effectively tackle, if we could only answer the question - what can we do to catalyze research excellence?

One of the first things we did was create a "research tool-box" – a variety of programs and specific initiatives designed to meet the needs of individuals, research teams and stakeholders working in established and/or emerging fields. (see page 10) By taking a multifaceted approach, the tool-box can provide support for trainees and mentors while helping researchers progress from independent idea generation to the formation of multidisciplinary research teams in partnership with stakeholder communities and ultimately, to the creation of new and innovative applications that will help improve the health and quality of life of all Canadians.

As our programs continued to evolve, so

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Best Practices Focus of Bone and Joint Decade Action Committee

back-to-back conferences tackle standards of care

As chairman of Canada's national action committee for the Bone and Joint Decade (BJD), Dr. Jim Waddell has more than enough on his plate. Next October, in Ottawa, he will be the host for a gathering of his BJD action-committee counterparts from 40 or more countries, as well as members of the BJD international steering committee. What's more, the BJD international conference will come immediately prior to a research conference sponsored by the Canadian Arthritis Network (CAN) and a national consensus summit sponsored by the Alliance for the Canadian Arthritis Program (ACAP) that will focus on standards of care for arthritis.

Waddell knew he needed help, and he knew exactly who to call. "Denis Morrice was one of the first people I approached to try to build up some enthusiasm for the Bone and Joint Decade in Canada. He was tremendously helpful in getting the whole process started. He realized how important it was to have some kind of organization that could bring people together from the many different parts of the musculoskeletal spectrum." The timing for recruiting him couldn't have been better, since Denis Morrice was retiring after 12 years as president and CEO of The Arthritis Society.

Every year, the BJD national action committees from each country get to nominate worthy individuals for recognition and honorary positions. Last year, IMHA's Scientific Director, Dr. Cy Frank, was singled out "for his remarkable achievements in fostering public and private partnerships through the Institute and at Calgary's McCaig Centre," says Waddell. "This year, with Denis stepping down, I wanted him to become the Canadian Ambassador for the Bone and Joint Decade."

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did our tool-box. Today, each program in the tool-box is actually a building block in our "Pyramid of Research Excellence" (see below). Here's one overly simplified example of how this model could work:

A researcher enters the pyramid by applying for a program such as an Operating Grant. The next step could be getting involved in a small research team by applying for a Training Program or Development Grant. Later on, s/he may decide to join another team of ever-increasing size and complexity with a diversity of stakeholders by applying for an ICE, NET or even an IHRT or CAHR grant. Ultimately, as a result of his/her collaborative efforts, this researcher just might find him/herself being part of, or possibly even heading up, a national centre of excellence or an international consortia.

At the end of the day, it's really all about providing the research community and accompanying stakeholder groups with options for achieving research excellence.

Over the past four years, IMHA's strategy has proven to be quite successful. (see page 4) In fact, the average success rate for IMHA researchers applying for programs through the Institute's "tool-box" have been higher, on average, than those in the open competition - which ranged from 24 per cent to 33 per cent during the same time period. Although Canada is extremely fortunate to have such an excellent pool of researchers, it is unfortunate that adequate funding is not always available to support those researchers; the September 2004 Operating Grants Competition is a perfect example.

From the very beginning, CIHR has received an increasing number of excellent proposals from a broad range of investigators. The downside is that funding has not been able to keep pace with the increasing demand resulting from building capacity to meet the broadened mandate set out by the CIHR legislation in 2000, and the increasing quality of the applications. In this particular situation, applications increased by 13 per cent from 1,496 in September 2003 to 1,686 in September 2004, while the budgetary envelope for this competition for the first year of funding was only $44.2 million compared to $46.4 million for the September 2003 competition. As a result, many truly excellent proposals could not be funded.

While this is an extremely disappointing turn of events, IMHA has a program in its tool-box - the Priority Announcement Operating Grants – specifically designed to address this issue. Priority Announcement Grants provide support for researchers whose peer-review ratings are above the excellence cutoff when CIHR funds have been exhausted. Researchers who apply through the Open Competition, and affiliate with IMHA, also have an opportunity to receive Institute funding via the Priority Announcement Program. With this funding in place, they can continue to obtain pilot data and take advantage of peer review feedback towards resubmitting their proposal in the next Open Competition. In the case of the September 2004 Competition, IMHA was able to provide Priority Announcement funding to six excellent investigators who self identified with IMHA when completing their 2004 Operating Grant applications.

While Priority Funding is an excellent program that can help minimize some of the challenges, IMHA recognizes that it is not a long-term solution. What we really need is to work together to identify other external sources to support the excellent research that is being conducted across this country. IMHA is currently working to develop such a strategy - one that we hope will help address the current funding problem and contribute to the ongoing success of our research community. ■

INSIDE THIS ISSUE

What's Hot at NIH

Community Participation in Research

health promotion, disease prevention and health disparities

The National Institutes of Health (NIH) Interagency Working Group on Community-based Participatory Research recently announced a "Community Participation in Research" (PAR) that will support research on health promotion, disease prevention and health disparities jointly conducted by communities and researchers. Open to domestic and foreign institutions/organizations, NIH, the Agency for Healthcare Quality and Research (AHRQ), and the Centers for Disease Control and Prevention (CDC) are currently participating in this PAR.

Community-based participatory research (CBPR) is defined as scientific inquiry that is conducted in communities and in partnership with researchers. The process of scientific inquiry is such that community members, persons affected by the health condition, disability, or issue under study, as well as other key stakeholders, have the opportunity to be full participants in each phase of the work (from conception to design, conduct, analysis, interpretation, conclusions and communication of results). CBPR is characterized by substantial community input in the development of the grant application.

Community-partnered approaches to research promise to deepen our scientific base of knowledge in the areas of health promotion, disease prevention, and health disparities. In addition, this approach offers the potential to generate better-informed hypotheses, develop more effective interventions, and enhance the translation of the research results into practice. More specifically, including community and academic partners as research collaborators may improve the quality and impact of research. Here are a few examples:

- More effectively focusing the research questions on health issues of greatest relevance to the communities at highest risk
- Enhancing recruitment and retention efforts by increasing community buy-in and trust
- Enhancing the reliability and validity of measurement instruments (particularly survey) through in-depth and honest feedback during pre-testing
- Improving data collection through increased response rates and decreased social desirability response patterns
- Increasing relevance of intervention approaches and thus likelihood for success and targeting interventions to the identified needs of community members
- Developing intervention strategies that incorporate community norms and values into scientifically valid approaches

For the purpose of this PAR, community refers to populations that may be defined by: geography; race; ethnicity; gender; sexual orientation; disability, illness, or other health condition. It also includes groups that have a common interest or cause, such as health or service agencies and organizations,

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Bone and Joint Decade continued from page 1

For the time being, the triple conferences next year will be enough to occupy a good deal of Morrice's energy. But Waddell concedes that he has a long-term plan in mind for his newly minted BJD ambassador. "First of all, the conference is an ideal opportunity for Denis to meet people from all these different countries. Also, ambassadors are often asked to join the international steering committee. I'd like to see Denis bring to the international stage what I believe are his tremendous skills at getting people to work together. He's going to help us here in Canada, but in a year or two I'm hoping Denis will be an integral part of the Bone and Joint Decade's international steering committee."

Staging the BJD conference back-to-back with the CAN conference and the ACAP summit does more than help spread a lot of the associated costs, it also allows for more integrated agendas. The Canadian Arthritis Standards of Care Summit will address such key issues as diagnosis, wait-times, home-care services and access to biologic agents. The ultimate goal is to help put into practice the standards of care outlined in the Canadian Arthritis Bill of Rights and Responsibilities. This social contract (championed by arthritis patient advocates with Denis Morrice's help) articulated the expectations and obligations of people with arthritis and the health-care professionals that treat them. Clearly, the conference will need representation from all stakeholders in the Canadian arthritis community, as well as key government policy-makers. "Now that the different levels of government have come to an accord on health-care funding," says Morrice, "it's more important than ever for the arthritis community to speak from the same page, to agree to agree. That's why coming to consensus on standards of care for arthritis is such a priority. We have a window of opportunity to influence how arthritis care is to be delivered for the next decade.

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health care or public health practitioners or providers, policy makers, or lay public groups with public health concerns.

Community-based organizations refer to organizations that may be involved in the research process as members or representatives of the community. While not an exhaustive list, organizations as varied as Tribal governments and colleges, state or local governments, independent living centers, health delivery organizations (e.g., hospitals), health professional associations, non-governmental organizations, and federally qualified health centers are possible community partners.

For further information, please visit: *http://grants2.nih.gov/grants/guide/pa-files/PAR-05-026.html* ■

Table of Success Rates

	2001-2002			2002-2003			2003-2004			2004-2005			Total Investments
	Rec'd	App.	S. Rate	Rec'd	App.	S. Rate	Rec'd	App.	S. Rate	Rec'd	App.	S. Rate	
Team Planning and Development Grants							11	5	45%	14	3	21%	$956,739
Inventions, Tools, Techniques, and Devices for Research in Health Care				11	4	35%	22	7	32%	24	4	16%	$3,526,043
Strategic Training Programs	15	10	67%							4	2	50%	$9,203,691
NET Grants							6	3	50%	15	4	27%	$3,650,847
New Discoveries and High Risk Grants				2	1	50%	14	8	57%				$1,046,772

Legend
Rec'd – Applications Received
App. – Grants Approved
S. Rate – Success Rates

Picking up the Pace

did free pedometers make Canadians more active?

The long march begins with the first step. As trite as this truism may seem, its timeless motivational message is at the crux of an initiative called "Canada on the Move". Two thousand steps may add up to a mile (or about 20 minutes walking), but the hardest step of all is often the first small one. Teasing out the complex factors — attitudes, motives, local support, neighborhood and so on — that induce people to take that first step, change their behaviour and become more physically active is the program's long-term research goal.

It all began in fall 2003 when scientific director Dr. Diane Finegood and her colleagues at the Institute of Nutrition, Metabolism and Diabetes (INMD) learned that, as part of a marketing promotion, Kellogg Canada would be distributing pedometers in boxes of Special K breakfast cereal. As Finegood recalls, "We thought, 'Okay, is dispensing a million pedometers to the Canadian public going to change anything?' It might change sales behaviour for Kellogg — that's the business they're in — but would it change people's behaviour around physical activity?"

Here was a perfect opportunity to gauge the impact of a "natural experiment" that sought to raise people's awareness about their level of physical activity by providing them with a pedometer as a feedback tool. But would it motivate usually sedentary people to get up off the couch and be more physically active — to literally take a step in the right direction? With some financial assistance from IMHA and partnerships with Kellogg Canada, Sun Microsystems, web designer Blue Spark and pedometer distributor New Lifestyles Canada, the project began to take form. "Part of our mandate is to learn more about the barriers that prevent people from being active," says IMHA's Scientific

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IMHA Launches Knowledge Exchange Task Force

IMHA has always recognized the tremendous contribution that patients/consumers can make towards creating a research agenda that addresses the most pressing health issues of the day. So much so, that the Institute recently took steps to formalize the process launching the "Knowledge Exchange Task Force" (KETF) at a dinner meeting in Ottawa on November 4, 2004.

Ms. Flora M. Dell, Dr. Cy Frank and Honourable Marilyn Trenholme Counsell celebrate the KETF launch.

Under the leadership of Task Force Chair, Ms. Flora M. Dell, with the assistance of IMHA Staff Lead, Elizabeth Robson, the KETF is comprised of patients/consumers and researchers across IMHA's six foci – arthritis, MSK rehabilitation, bone, muscle, skin and oral health. The goal of this pilot project is to proactively accelerate the interpretation and exchange of new research knowledge among clinicians and consumers to improve the well-being of all Canadians. In so doing, the KETF will strive to:

- Develop an understanding and value of key research presented
- Support a meaningful two-way exchange of knowledge and information between the Researchers and Task Force members
- Develop opportunities to promote and activate new knowledge, findings and outcomes of current research with peers, organizations and the public at large
- Build on the strength of existing knowledge and training incorporating the vision of the Institute of Musculoskeletal Health and Arthritis and its research priorities

"Today, half way through the Bone and Joint Decade, the burden of illness of musculoskeletal diseases is still a well kept secret - $16.4 billion per year," said IMHA's Scientific Director, Dr. Cy Frank. "By establishing the KETF, we hope to empower a group of Research Ambassadors to help build a bridge to enhance knowledge and understanding with the ultimate spin off effect of increasing research and decreasing the burden of illness of MSK diseases and conditions."

IMHA's special dinner guest, Hon. Marilyn Trenholme Counsell, Senator, echoed Dr. Frank's comments. "I am truly touched that the World Health Organization chose the first decade of the 21st century as a 10-year period to be dedicated to musculoskeletal health and arthritis. This is a world-

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wide recognition of the fact that a very high percentage of all citizens will suffer pain and a loss of their full possibility of participating in life because of these diseases. During this decade, I hope that great progress will be made in the prevention and treatment of musculoskeletal diseases and arthritis for our youngest and our oldest citizens."

The dinner celebrated the formation of the Task Force, but the real work began the next day when the group listened as Dr. Sandra LeFort shared the results of her Chronic Pain Self Management Program (CPSMP). Today, an estimated 17 per cent of Canadians suffer from chronic pain problems such as chronic headaches and a broad array of musculoskeletal diseases and conditions including rheumatoid and osteoarthritis, osteoporosis, lupus and muscular dystrophies. Not surprisingly, these ailments create severe distress and disability and have a negative impact on an individual and his/her family - not only physically, but emotionally, psychologically and economically.

"Individuals living with a chronic illness need to be active participants in the management of their conditions," said KETF member Barbara Grimster, a lupus patient and Board member of Lupus Canada. "Living with lupus is one thing, 'living well with lupus' is another. Empowering patients to be part of the entire research process is timely and imperative."

In spite of the high prevalence and severe impact of these conditions, access to specialized pain services is very limited in Canada. To meet this need, Dr. LeFort developed a low-cost, accessible, community-based patient education program that ran for two hours per week over the course of a six–week period. The goal of the program was to give people the skills and confidence to better manage their chronic pain and ultimately improve their quality of life. Hence, the program was called the Chronic Pain Self Management Program (CPSMP). "The two studies I conducted have tested the effects of this program and have shown positive results," said LeFort. "However, the next step is working with groups and health care agencies to make sure that programs like these are available to the people who need them wherever they live in Canada."

Following Dr. LeFort's presentation, the group broke out to discuss what the study meant to them, how the information could be shared and to whom it should be shared with. As the result of their discussions, the KETF made the following observations:

- Dr. LeFort's research has broad applications in chronic pain management for many health conditions (IMHA and beyond) and KETF can drive that pro–cess
- Messages must be tailored to meet the needs of specific audi–ences, taking into account Canada's cultural diversity
- A paradigm shift is needed in knowledge exchange (and KETF is the model)

IMHA's Knowledge Exchange Task Force will continue to explore chronic pain and a program to facilitate knowledge exchange at its next meeting in April 2005 in Ottawa. As the Task Force moves forward, efforts will be made to expand its focus to address various issues across IMHA's six foci and three priority areas. ■

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Following a well-tested formula for funding these kinds of conferences, IMHA will be one of the major sponsors, along with the Canadian Arthritis Network and The Arthritis Society. "We're starting to get pretty experienced at bringing together key arthritis stakeholders to explore issues from many different perspectives," says Dr. Frank. "And I think it says a lot about the participants — whether it's OA or RA or standards of care — that we emerge with a much clearer sense of direction and renewed confidence in our approach to issues. I'm hoping that the standards of care conference will create a sort of moral imperative that can be translated into better care for Canadians with arthritis."

Waddell says he's particularly excited about linking the three events, since a number of the international members of the BJD will be invited to attend the research and the arthritis conferences and take part in the process of establishing standards. "As you can imagine, it's hard to find a standard of care that's applicable across 40 countries," he says. The different health-care systems and different financial obligations make it too difficult to find a universal solution for any one issue. But Waddell hopes that, if the actual content doesn't survive translation to the international level, the concept will.

The BJD International has identified osteoporosis and trauma as global priorities, so "our conference will focus first on trying to set minimal standards of care for proximal femoral-neck fractures (hip fractures) and chronic pain. And then we'll try to define optimal standards. That way, if you were the health minister of a South American or African nation, you could see a continuum between the two standards and gauge where your country falls between them. Then you could perhaps develop strategies for moving a little bit toward what is defined as optimal care,"said Waddell.

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Thanks for the Memories

IMHA pays tribute to retiring board members

CIHR's Institute Advisory Boards were established to provide input and advice to the Scientific Directors of each of its 13 Institutes. Recruited through a public process with final appointments made by Governing Council, these volunteers bring invaluable knowledge, experience and expertise to the table in shaping the future direction of each Institute.

In 2004, IMHA bid farewell to three members who provided exemplary guidance and direction to the Board - Dr. Joan McGowan, Dr. Robert McMurtry and Dr. Robin Poole. In this issue of IMHA On The Move, we'd like to take this opportunity to express our deepest appreciation for their dedication and commitment and to share with you some of their parting thoughts and future directions.

Dr. Joan McGowan

"Making policy and developing strategy with a limited budget is very challenging," says Dr. Joan McGowan, who as director of the National Institutes of Health's (NIH) Musculoskeletal Diseases Branch of the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) has brought a unique perspective to the Institute's Advisory Board since its inception.

NIH operates 27 "independent organizations," which, Dr. McGowan says, makes it more difficult to implement NIH Director Dr. Elias Zerhouni's strategic vision - creating the research teams of the future and addressing some of the larger cross-cutting issues in medical research. Whether visionary leadership is central or at the periphery, lack of funds is a common condition at NIH as well as CIHR. "There's no easy answer," she says. "Certainly, the less money you have, the more strategic you have to be."

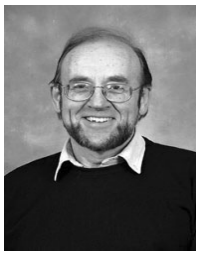
Since 1991, Dr. McGowan has been involved with the NIH's "Women's Health Initiative" a 13-year study of 165,000 women, which will be concluding all its clinical trials in March. The data and papers to come out of this study are likely to attract some of the same attention that earlier findings on hormone replacement therapy did. Another project reaching fruition, after two years of effort, is the first-ever US Surgeon General's Report on Bone Health and Osteoporosis. "We are hoping," says Dr. McGowan, "that this will contribute to greater awareness about bone and joint diseases and drive important public-health measures in keeping with the goals of the Bone and Joint Decade."

Dr. Robert McMurtry

"Keep the faith," says Dr. Robert McMurtry, as he steps down from the IMHA Advisory Board. "Keep doing what you're doing, because you have it right." As a member of the CIHR interim governing council, Dr. McMurtry knows whereof he speaks: "The original vision was to create robust institutes that were across the country and really the 'beating hearts,' if you will, of the CIHR. IMHA is an exemplar of what an Institute should be." He expresses deep disappointment at the current trend to centralize resources, and feels it's a direction best not taken. Still, he remains full of praise for Cy Frank: "He sets a standard for leadership, unmatched by anyone, in my view."

Pursuing his keen interest in population health, Dr. McMurtry is part of two research teams that have recently received funding to pursue two separate research projects: one on developing an index of well-being, and the other examining the dynamics of work, worker and workplace injuries: "People succeed in spite of injuries if there's appropriate accommodation and supportive behaviour in the workplace environment."

Dr. McMurtry has also accepted a high-profile role as chair of the National Health Council's Wait Times and Accessibility Group. "It's quite the hot-button issue," he says. "But I think there is reason for cautious optimism. Everybody agrees something has to happen, and there's definitely going to be change. Let's hope it's a change for the better."



Dr. Robin Poole

"There's no doubt about it that IMHA has had a major impact on our ability to generate tremendous new opportunities in multi-disciplinary, cross-thematic training," says departing Advisory Board member Dr. Robin Poole. "What I like about IMHA is that you have a real chance to influence young investigators and bring them into the field of musculoskeletal research, which is terribly important." As a case in point, he cites the new visiting scholar program, which allows distinguished

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New Initiative puts Regenerative Medicine and Nanomedicine under the Microscope

degenerative disease and periodontal disease focus of IMHA research

Until recently, the idea that human beings could actually grow new limbs was the stuff of science fiction. But today, a new dimension of health research - Regenerative Medicine and Nanomedicine - is bringing that far fetched concept one step closer to reality.

For the first time, research in Regenerative Medicine and Nanomedicine is using natural or bioengineered materials to stimulate the renewal of bodily tissues and/or the restoration of function. Recent advances in stem cell technologies, tissue engineered organs, transplantation and imaging are also pushing the boundaries of Regenerative and Nanomedicine, as is the application of nanotechnology - materials, tools, techniques and devices based on the nanometer length scale.

To promote research in this growing new field, CIHR launched its "Strategic Initiative in Regenerative Medicine" in June of 2003. Lead by the Institute of Neurosciences, Mental Health and Addiction and the Institute of Genetics, in collaboration with the Institute of Musculoskeletal Health and Arthritis (IMHA), and a plethora of other partner organizations and CIHR Institutes, this cross-cutting initiative may not only satisfy a common need amongst health research organizations, but allow for technology and knowledge to intersect in new and innovative ways to generate groundbreaking discoveries.

By leveraging research dollars, the "Regenerative Medicine and Nanomedicine: Innovative Approaches in Health Research – New Discoveries: High Risk Seed Grants", is committed to funding research in three primary areas: Nanotechnology, Stem Cells, and Tissue Engineering. With the support of CIHR central and its partners, this approach enables Institutes to participate in funding more projects within the same budget, with stakeholders reaping the benefits. And so, when the Honorable Jean-C. Lapierre, Minister of Transport and Regional Minister for Quebec, and Dr. Alan Bernstein, President of CIHR announced on November of 2004 that 8 teams of CIHR researchers would be awarded 12.3 million dollars through this initiative, IMHA was excited to find that one of its researchers, Dr. William L. Stanford, was one of the recipients.

Stem Cells and Disease

Dr. Stanford, a Canadian Research Chair in Stem Cell Biology and Functional Genomics, and his team plan to study the basic biology of the adult stem cell and its relationship to disease, particularly degenerative disease. Post-natal stem cells, or adult stem cells, have the ability to develop and differentiate into any type of cell, from the original tissue while simultaneously being able to reproduce themselves. Stanford's hypothesis is that many degenerative diseases deplete the affected tissue of its stem cells, either directly or indirectly. IMHA funding already seeded his laboratory's discov-

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2005 Upcoming Events

Mar. 3 - 4 Institute Advisory Board Meeting/ Stakeholder Forum

Mar. 9 - 12 International Association for Dental Research Conference

Mar. 14 - 15 Third Annual Nanomedicine Meeting

Mar. 30 - 31 Institute of Aging Regional Seniors' Workshop on Research

Apr. 17-19 2nd Knowledge Exchange Task Force Meeting

May 26 - 28 11th Annual Canadian Connective Tissue Conference (CCTC)

June 8 Institute Advisory Board Meeting (Teleconference)

June 22 - 25 Canadian Federation of Biological Sciences Conference

Aug. 29 - 31 Institute Advisory Board Strategic Planning Meeting/ Stakeholder Forum

Sept. 18 - 21 Canadian Public Health Conference

Oct. 27 - 29 International Meeting of the Bone and Joint Decade

Nov. 17 Institute Advisory Board Meeting (Teleconference)

The Douglas Kinsella Award for Research in Ethics

In June 2004, IMHA was deeply saddened by the passing of Dr. T. Douglas Kinsella who had served as the Advisory Board's Ethics Designate. Dr. Kinsella had dedicated much of his life to the study of bioethics including research into physicians' opinions about ethical, legal and medical issues involved in assisted suicide, involuntary euthanasia, and genetics research. He was also a champion of research ethics especially in the area of governance and ethical issues inherent in human experimentation.

Through his leadership, Dr. Kinsella left a tremendous mark on the medical and research community in roles such as Director of Medical Bioethics and Professor of Medicine, the University of Calgary; President, Canadian Rheumatism Association; and Member of the Human Resources Committee of the Canadian Blood Services, to mention only a few. Even in retirement, Dr. Kinsella remained actively involved in community affairs through activities such as the Community Editorial Board of The Kingston Whig Standard.

In recognition of Dr. Kinsella's lifelong promotion of the ethical treatment of humans in research, IMHA took a leading role in creating an award to recognize his efforts – the Douglas Kinsella Doctoral Award for Research in Ethics. This Doctoral Research Award is offered to an outstanding individual whose research focuses on ethical issues and concerns related to health and/or health research.

For a complete description of the Douglas Kinsella Doctoral Award for Research in Bioethics, please visit: *http://www.cihr-irsc.gc.ca/e/24643.html* ■

Picking up the Pace continued from page 5

Director, Dr. Cy Frank. "The rising incidence in North America of obesity, diabetes and arthritis tells us that we have become too sedentary for our own good. The reasons why we're sedentary are extremely complex, and The Canada on the Move research is designed to capture that complexity. The resulting data will be of tremendous value."

In a stroke of pure social-marketing genius, the back of the Special K box asked people to use the free pedometer and then donate their counted steps to health research at the Canada on the Move website. Since December 2003, more than 500-million steps have been donated, and in the process more than 3000 people have filled out an on-line survey, which is the project's primary data-collecting instrument. Donors provide basic demographic information and are questioned about their level of physical activity, the type of neighborhood they live in and their self-confidence in walking an additional 2000 steps per day. On return visits, walkers can contribute more steps and receive a chart that marks their progress and provides positive reinforcement.

"There's no magic number," says Dr. Adria Rose, the Director of Partnerships for Canada on the Move. "The number of steps doesn't really matter. It's the fact that you're making the effort to change. Rather than saying to people, 'You're going to have to change your whole life. What are some of the small things you can do?' That's a bit of the logic behind donating steps. It allows you to say, 'Well, I took a few more steps today.' And small steps do add up."

People can still participate by simply filling out the survey if they don't have a pedometer. Currently, Rose is trying to recruit more donors through partnerships with groups that promote physical activity. She hopes they will encourage the public and their members to contribute their steps. The City of Ottawa, for example, has a walking program through which participants can borrow a pedometer from the library and are urged in the program literature to donate their steps to Canada on the Move. "We're also looking for partners who will help us move the actual research forward and IT partners who can help us with the website and the data platform," says Rose.

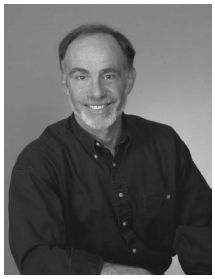
Canada on the Move, says Rose, shouldn't be seen as yet another program trying to encourage people to be active. There are plenty of those. Instead, she says, "science will always be our main focus. We want to bring in other researchers to try to determine what works and what doesn't as well."

Data should be available to researchers and other stakeholders later in 2005 when the initial research team "releases a set of manuscripts published as a special supplement to the *Canadian Journal of Public Health*," says Finegood. "By next fall, we're hoping to engage a bigger cross-section of researchers, practitioners, policy makers and individual Canadians to further our effort to improve health through health research that identifies effective approaches to health promotion and disease prevention." ■

IMHA Welcomes New Board Members

Dr. Lois Cohen
Associate Director for International Health
National Institute of Dental & Craniofacial Research
National Institutes of Health
Bethesda, MD USA

A sociologist who has pioneered the integration of the social and behavioral sciences and dental research, Dr. Cohen has published over 120 research papers and edited four books. She co-directed major cross-national collaborative studies on oral health delivery systems and currently serves as the Director of the World Health Organization's Collaborative Center for Dental & Craniofacial Research. As Associate Director for International Health of the National Institute of Dental & Craniofacial Research, she also directs the Office of International Health which serves to coordinate all intramurally and extramurally-funded research relevant to global health priorities, and serves as the principal liaison for the Institute with international and multinational organizations and agencies.



Dr. Richard Ellen
Professor
Faculty of Dentistry and Faculty of Medicine
University of Toronto

Dr. Richard P. Ellen is a professor in the Faculty of Dentistry (former Head of Periodontics and Associate Dean, graduate and postgraduate studies) and cross-appointed to the Graduate Department of Laboratory Medicine and Pathobiology in the Faculty of Medicine at the University of Toronto. He is the director of the CIHR strategic training program "Cell Signaling in Mucosal Inflammation & Pain" and is a recognized authority on oral microbial ecology, the biology of dental plaque and other biofilms, the biology of spirochetes, and the pathogenesis of periodontal diseases. Dr. Ellen has published dozens of peer-reviewed research articles, and is on the editorial board for both the Journal of Periodontology and Critical Reviews in Oral Biology and Medicine. Currently a member of the Canadian Institutes of Health Research (CIHR) Group in Matrix Dynamics, and the regional board member for North America of the International Association for Dental Research, Dr. Ellen is also a past president of the Canadian Association for Dental Research.

Dr. Maryam Tabrizian
Associate Professor
Department of Biomedical Engineering
Faculty of Medicine and Faculty of Dentistry
McGill University

Dr. Maryam Tabrizian is both Associate Professor in the

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Given the substantial morbidity and mortality associated with hip fractures and chronic pain, there's a lot to be gained by having a minimal standard of care for treating these patients. "What we're hoping for," says Waddell, "is that the three conferences will be able to share methodologies for research and specifically for developing standards of care. This will assist discussions around hip fractures and pain management. We hope there will be a cross-fertilization of ideas and that the Canadian model of reaching consensus will be exported back to member countries. That would be a good outcome." ■

IMHA's Research Tool-Box

1. Grants & Awards
- Inventions, Tools and Techniques in Health Research
- New Discoveries
- Operating Grants
- Priority Announcements
- Knowledge Translation
- Training Awards
2. Training Programs
- Strategic Training Initiatives in Health Research (STIHR)
3. Development grants
- Workshop Program
- Team Planning and Development Grants
4. Networks – ICE/NET
- New Emerging Teams (NET)
- Interdisciplinary Capacity Enhancement Teams (ICE)
5. IHRT/CAHR
- Interdisciplinary Health Research Teams (IHRT)/ Community Alliances for Health Research (CAHR)
6. National centres of Excellence
7. International Consortia

Regenerative Medicine continued from page 8

ery that a mutation preventing bone stem cells from reproducing efficiently leads to early onset of age-related osteoporosis. In other diseases, mature cells are the targets of degenerative diseases, prompting tissue stem cells to repeatedly make more mature cells which will eventually exhaust the pool of stem cells for that tissue. Stanford believes that defects in the maintenance of organ-specific stem cells leave the body more susceptible to disease. By understanding the biology of the stem cell and its mechanisms controlling their reproduction and differentiation, Stanford believes that new drugs can be discovered to replenish a healthy supply of stem cells as a means of treating the disease.

Dr. Stanford intends to use a portion of his research dollars to train new PhD and Masters students in this collaborative field of study. "This is the crux," he states. "To do this research you need people from a multititude of different disciplines." Dr. Stanford points out that this kind of lateral research, fused with the kind of technology that is now available to biologists, is what leads to breakthroughs.

His research also encompasses two aspects of IMHA's broad mandate - understanding the basic biology of bone and the musculoskeletal system, and deriving new therapeutics from that understanding. The new knowledge created by research undertakings like Dr. Stanford's will also serve to help bridge the gap for other IMHA researchers with a focus on the potential benefits of stem cell research.

Periodontal Disease and Stem Cells

Dr. Edward Putnins, a dentist specializing in periodontics, just happens to be such a researcher. Dr. Putnins, who also holds a PhD in cell biology, was studying the regulation of periodontal disease onset, specifically how mucosal cells respond to chronic inflammation, when the question of stem cells arose. While on sabbatical, Dr. Putnins met with Dr. Fabio Rossi, Canadian Research Chair and member of Canada's Stem Cell Network, who informed him of the Regenerative Medicine Initiative. As it turned out, Dr. Putnins received funding directly from IMHA to launch a pilot project associated with this RFA.

Responding to the three C's of periodontal disease - chronic, common, and costly, Dr. Putnins believes his research will ultimately prove to be highly therapeutic. In 1999, the United States alone spent an estimated 14.3 billion dollars for periodontal treatment and preventative procedures; not a big surprise since an estimated 33 per cent of the population have advanced, moderate, or mild periodontitis. When a patient is diagnosed with periodontitis, the tissues supporting the teeth, namely ligament and cementum, become inflamed and if not treated will lead to tissue destruction and tooth loss. Dr. Putnins will transplant postnatal bone marrow stem cells into a targeted area to see if they generate the three types of tissue lost during disease.

Dr Gilbert Blaise presents the IMHA sponsored "Highest Ranked Poster" award in the area of "Oral Health or Pain Research" to Jean Sébastien Walczak at the Pain Days Conference held in Montreal.

Individuals suffering from periodontal disease will be the obvious beneficiaries of Putnin's

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Memories continued from page 7

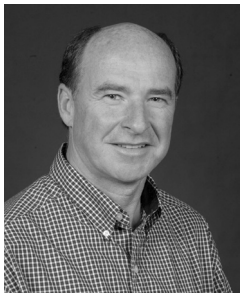
scientists to go to small or remote academic centres to lecture and act as a stimulus to research trainees: "This is something I was particularly keen on promoting because there were very limited opportunities for interactions between Canadian research institutes and universities. It's a nice example of how an institute can listen to its Advisory Board."

Dr. Poole does, however, note widespread concern and frustration with regard to research funding and the current centralized review process which he feels isn't working well. "The whole review process has become extremely conservative, and it's not helping to develop creative, innovative research. One speaks about the CIHR having replaced the MRC, but the institutes have so little money to work with to introduce new programs that their hands are very much tied. There's just not enough money put behind the Institutes and that has to change in the future."

In addition to his ongoing research into cartilage metabolism, Dr. Poole continues his deep involvement with the Canadian Arthritis Network as one of its founders. Indeed, he is the Network's representative in the Alliance for the Canadian Arthritis Program, a strategic coalition of stakeholder groups (including and founded by IMHA) that is committed to moving the arthritis research agenda forward. ■

New Board Members continued from page 10

Department of Biomedical Engineering at McGill University and Director of the FQNRT Centre for Biorecognition Systems and Biosensors. She obtained her PhD in Physical Sciences from Université Pierre et Marie Curie (France) in 1990. In addition to her background in physical sciences, she obtained a Master Degree in Business Administration from Ecole des Études Commerciales de Montreal in 1999. Dr. Tabrizian's research involves developing advanced biomaterials and bioactive surfaces, as well as studying their biological activities. The use of naturally-derived polymers and polymer composite as delivery systems, as matrix for tissue engineering, and as nanostructured coating for biosensors interface are the main areas of application of her research.



Richard Singleton
Professor
Pastoral Studies
Queen's College
Memorial University of Newfoundland

Dr. Richard Singleton is currently a Professor of Pastoral Studies at Queen's College in the Faculty of Theology at Memorial University of Newfoundland. He is also the Director of Pastoral Care at the Health Care Cooperation of St. John's as well as the Volunteer Executive Director of the Bereavement Association in St. John's. Dr. Singleton has had a leading role in spiritual care, grief and bereavement services, cultural diversity and health care ethics. He is a certified member of the International Association of Death Education and Counselling. In 2003, he received the Green Award from the Health Care Corporation of St. John's (HCCSJ). ■

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research since currently the only repair system available is frequent maintenance. Dr. Putnin's believes that stem cell research will not only prevent pain and suffering, but the high cost of long-term treatment. Eventually, Dr. Putnins hopes that the results of his pilot project will help him qualify for a team grant with a group of international scientists who will work towards engineering a new membrane that can promote survival differentiation during this type of regenerative repair.

Both Dr. Stanford's and Dr. Putnin's research projects exemplify the purpose of the Regenerative and Nanomedicine Initiative - to take researchers from different yet complementary backgrounds, bring them together and act as a catalyst to spark new, innovative synergy in health research. CIHR believes strongly in this model and has already launched its second "Regenerative Medicine and Nanomedicine: Innovative Approaches in Health Research – New Discoveries: High Risk Seed Grants" with a registration deadline of April 1st, 2005. For its part, IMHA has committed to help fund a team grant for this round of applications and is excited to be on the forefront of this new frontier in medical research. ■

SPREAD THE WORD

Have you received an award, enjoyed a major research success, or simply have some news you'd like to share? If so, we'd like to hear from you. Just send a quick email to :

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