

Summer 2017

OC Clinical Practise Guidelines Update Meeting

Following the receipt of a CIHR planning grant, under the leadership of Suzanne Morin, a group of SAC members and guideline development experts met in Toronto to initiate discussions around updating the 2010 clinical guidelines. The objectives of the day were the following:

- 1. Establish the overall structure for the guideline update process
- 2. Identify key areas requiring update and propose initial research questions
- 3. Determine procedures for
 - A) broader consultations with stakeholders: clinicians, patients, and policy-makers,
 - B) management of conflict of interest of participants, and
 - C) review of published evidence
- 4. Explore funding opportunities and collaborations

The agenda included a review of the evidence to decision making framework (GRADE approach), Patients and Primary Care Physicians perceptions and barriers to therapy, the inclusion of patients in the process, Conflict of Interest Management, Fracture Risk Assessment, and Guidelines Uptake and Dissemination.

Members of the group will meet at ASBMR to discuss next steps. Details will be reported in the next SAC Link.

Upcoming Events

ASBMR BREAKFAST 2017

OC will be hosting a breakfast at ASBMR in Colorado. It is planned for Saturday September 9th at 6:30 AM . Further details to follow. Please **RSVP** to Kerry if you plan to attend kgrady@osteoporosis.ca.

OC ANNUAL GENERAL MEETING

The Board of Directors/AGM face-to-face meeting will be held in Toronto, ON at the Novotel Toronto Centre 47 the Esplanade

Toronto

The dates are September 29 and 30, 2017

Canadian Musculoskeletal Conference 2018

The 2nd Canadian Musculoskeletal Conference will be held in Toronto on May 3-5 2018 under the directorship of Osteoporosis Canada, in partnership with Bone and Joint Canada. It will be held at the Double Tree by Hilton at 108 Chestnut St in downtown Toronto. Greater details to follow in the near future.



Summer 2017

Other Business

COI FORMS

Please return your completed COI forms to Kerry by August 11, 2017

LINDY FRASER AWARD NOMINEES 2017

Osteoporosis Canada is inviting nominations for the **2017 Lindy Fraser Memorial Award** from the SAC . This award recognizes individuals who have made an out-standing contribution to the field of osteoporosis research and education in Canada.

The award named in her honour recognizes individuals who have done exemplary research, have helped to increase the knowledge about osteoporosis and is a member of the SAC. It is Osteoporosis Canada's most prestigious award.

Please e-mail your nomination, with a brief letter highlighting why the nominee is worthy of this honour, to kgrady@osteoporosis.ca by July 28, 2017.

Her Royal Highness The Duchess of Cornwall in Ottawa celebrating Canada's 150th Anniversary



and HRH The Duchess of Cornwal

In celebration of Canada's 150th anniversary, Their Royal Highnesses, The Prince of Wales and The Duchess of Cornwall were in attendance for many festivities in Ottawa on July 1st including the inauguration of The Queen's Entrance at Rideau Hall.

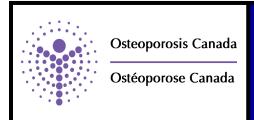
The inauguration's reception was hosted by Their Excellencies the Right Honourable David Johnston, Governor General of Canada and Mrs. Sharon Johnston with Dr. Famida Jiwa, President & CEO of Osteoporosis Canada in attendance.

During the reception, Dr. Jiwa had the honour of meeting and speaking with HRH The Duchess of Cornwall about the work of Osteoporosis Canada.



Dr. Famida Jiwa and His Excellency the Right Honourable David Johnston, Governor General of Canada

HRH The Duchess of Cornwall is the President of the National Osteoporosis Society in the U.K. and an active champion of osteoporosis, having lost her mother and grandmother to the disease.



Summer 2017

SAC Members Receive Distinguished Service Awards

Canadian Geriatric Society-2017 Ronald Cape Distinguished Service Award



Each year the Canadian Geriatric Society (CGS) presents an award at its Annual Meeting to recognize an individual who has made an outstanding contribution to the health care of older adults in Canada. Geriatrician *Alexandra Papaioannou* received the *2017 Ronald Cape Distinguished Service Award* from the Canadian Geriatric Society. The McMaster University professor of medicine has developed clinical practice guidelines on osteoporosis and preventing fractures in long term care, and she founded the Geriatric Education and Research in Aging Sciences (GERAS) Centre at Hamilton's Health Sciences Centre and McMaster University.

Dr. Papaioannou's contributions have made a positive and lasting effect on geriatric care in Canada. Congratulations Alex!

Dr Paul D. Miller ISCD Service Award

Each year at the ISCD's (International Society for Clinical Densitometry) Annual meeting, ISCD members are recognized for their service to the ISCD and to the field of densitometry. The Dr. Paul D. Miller ISCD Service Award is presented annually to an ISCD member for distinguished service and dedication to the ISCD.

Dr. David Hanley from the University of Calgary and member of Osteoporosis Canada's Scientific Advisory Committee was honoured with this award on April 20, 2017 at the ISCD annual meeting in Orlando, Fla.

Congratulations David!

Pictured here with Dr. Angela Cheung, Anita Colquhoun, Dr. Bill Leslie



Summer 2017

IOF President's Award honors global osteoporosis experts and advocates

The International Osteoporosis Foundation (IOF) has presented awards to individual members in recognition of their dedication to the work of IOF and commitment to advancing education and awareness in their regions Seven leading osteoporosis experts and advocates have received the 2017 International Osteoporosis Foundation (IOF) President's Award in recognition of their contributions to IOF and their commitment to advancing education and awareness in the field within their regions.



The presentations took place on March 24, 2017 at a special ceremony during the World Congress on

Osteoporosis, Osteoarthritis and Musculoskeletal Diseases, held in Florence, Italy from March 23-26, 2017.

Congratulations to **Dr David Kendler** for his commitment to advancing education and awareness in North America.

David is a Professor of Medicine (Endocrinology), University of British Columbia Faculty of Medicine; Director of Osteoporosis Centre of British Columbia and Prohealth Clinical Research; and is an active Member of the Scientific Advisory Council of Osteoporosis Canada and the IOF Committee of Scientific Advisors.

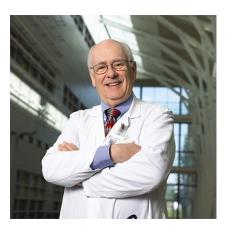
Well done David!

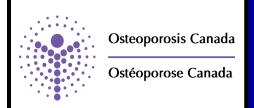
The Dr. David Hanley Osteoporosis Centre Calgary

The Osteoporosis Centre in Calgary has been renamed the Dr. David Hanley Osteoporosis Centre Calgary honouring Dr. Hanley and his decades long dedication to bone health. The centre provides comprehensive care and support for those with osteoporosis or metabolic bone disease. The Dr. David Hanley Osteoporosis Centre Calgary supplies education for clients, the community and healthcare providers including information about: diagnosis, prevention, treatment, information on exercise classes, latest clinical practice guidelines and more.

To learn more, please visit: http://osteoporosiscalgary.com/about/mission.html

Congratulations David!





Summer 2017

2017 CAMOS Award

Dr. Evelyn Wong

Dr. Evelyn MM Wong holds a Bachelor of Science in Pharmacy from the University of British Columbia and a Doctor of Medicine from McMaster University. She completed her Internal Medicine residency and Endocrinology fellowship at UBC and is currently a Metabolic Bone Disease fellow with Dr. Angela MW Cheung at the Osteoporosis Program of the University Health Network (http://www.osteoconnections.com). She is also completing her Master's in Clinical Epidemiology and Health Care Research at the University of Toronto.

Evelyn is thankful for the OC-CaMOS fellowship as it will grant her the ability to bring her project to fruition. Her project is entitled "Serum pentosidine levels in women with or without atypical femur fractures: Developing pentosidine as a bone health biomarker". Her additional mentors for this project are Drs. JC Prior, RG Josse, JD Adachi, and G Tomlinson.

The goal of this project is to develop a method to accurately measure pentosidine levels as a marker of bone health and use this method to examine for differences in serum pentosidine levels between patients with AFFs and controls and to establish



normative data in the CaMOS population. This project will serve as a catalyst and platform to establish serum pentosidine as a biomarker for bone fragility. By developing a robust method to measure pentosidine, this new knowledge can be applied to the overall CaMos population to examine if it helps predict the risk of fractures. This project has the potential to improve clinical assessment of skeletal health and thus quality of care.



Summer 2017

2017 Ph.D. Studentship Research Award

Isabel Rodrigues

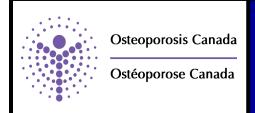
Isabel Rodrigues will be starting her Ph.D. studies in the Department of Kinesiology at the University of Waterloo, with a specialization in Aging Health and Well-Being, under the supervision of Dr. Lora Giangregorio. She received her Bachelor of Science (Honours) from McMaster University where she completed an undergraduate thesis with Dr. Jonathan Adachi, a rheumatologist, on X-ray damage in the joints of individuals with rheumatoid arthritis. Her work was part of a larger study that was published in the Journal of the American College of Rheumatology. Currently, she is completing a Master's of Science at in the School of Rehabilitation Science at McMaster University, under the supervision of Dr. Joy MacDermid. Her MSc thesis involved identifying the facilitators and barriers to exercise in people with osteoporosis. Her work on this topic has been published in several journals.

The Osteoporosis Canada Ph.D. Studentship Research Award will provide Isabel with the opportunity to be mentored by Dr. Giangregorio, and Dr. Angela Cheung from the University of Toronto, and to grow her skills as an independent researcher. Her Ph.D. research will focus on understanding the optimal type and level of physical activity to improve health outcomes for individuals with osteoporosis, and in particular,



individuals with acute spinal fractures due to osteoporosis. There is very little guidance on safe physical activity for individuals with recent spine fractures, so she will work on developing recommendations in this area. She will contribute to new meta-analyses exploring the effects of exercise on health outcomes in individuals with osteoporosis, with the intent of informing future clinical practice guidelines. She also hopes to continue her work from her MSc thesis by developing an intervention to increase the uptake of physical activity recommendations among health care providers and people with osteoporosis.

Isabel would like to express her sincere gratitude for this opportunity. The scholarship from Osteoporosis Canada will support valuable learning opportunities and advances in research.



Summer 2017

2017 Ph.D. Studentship Research Award

Dr. Ahmed Negm



Ahmed graduated from medical school at the University of Alexandria, Alexandria, Egypt (2004). In 2010, he was granted a Masters degree of orthopedic surgery, Al-Azhar University, Cairo, Egypt and the membership of Royal College of Surgeon of England. In 2013, he finished his MSc of Rehabilitation Science at McMaster University. Ahmed's thesis was entitled "Pain Measurement and Management in People with Knee Osteoarthritis". He is currently a PhD candidate, Rehabilitation School at McMaster University. He received several awards and scholarships including, the Ontario Graduate scholarship 2015 and CIHR Joint Motion Program Graduate Fellow in Musculoskeletal

Health Research. As a career, Ahmed is interested in the clinician-scientist model; therefore he follows his passion to clinical practice and research as well. His graduate research program focus on examining interventions to optimize physical and cognitive function in older adults with frailty and osteoporosis using randomized controlled trial and systematic review methodology.

Ahmed's project title is "Comparisons of Hip Fractures Rates for a New Fracture Risk Scale in Adults living in Long-term Care Across Canada".

Clinical assessment to predict if an individual is at risk of breaking a bone (such as Fracture Risk Assessment Tool) are not suitable for decision making and care planning for long-term care (LTC) residents. The fracture risk assessment tool is not suitable as it: 1) provide a 10 year risk of breaking a bone, which is too long, given that 20% of residents die within one year of LTC admission; 2) use bone mineral density as a main factor that predicts future risk of breaking a bone, however bone density is hard to obtain in LTC; and 3) does not include LTC specific risk factors for breaking the hip bone which are different than in the community specific risk factors. Our research team developed a clinical assessment called "Fracture Risk Scale (FRS)", which can predict risk of breaking a bone within one-year in LTC residents. The proposed research project aims to compare the rates of breaking a hip over an one-year period among LTC residents across Canadian provinces.

LTC residents will be included if they are: 1) adults admitted to LTC homes in Canada; and 2) received a Resident Assessment Instrument Minimum Data Set Version 2.0 (RAI-MDS 2.0). One-year broken hip risk was evaluated using the FRS, an eight level risk scale (level 8 represents the highest broken hip risk). We will assess the ability for the FRS tool to differentiate between LTC residents at low and high risk of breaking a hip. Results from this research project will inform policy, service delivery and care planning, and may improve care for residents of LTC across Canada.



Summer 2017

2017 Tim Murray Travel Awards

Matthew Wong-Pack



Matthew is a medical student at the University of Toronto. He works under the supervision of Dr. Jonathan Adachi and Dr. Arthur Lau in the Division of Rheumatology. Matthew's research interests lie in a number of fields including rheumatoid arthritis and osteoporosis. His research involves studying a subset of patients evaluated by the Fracture Liaison Service to understand the characteristics of those examined and the care gap in fracture prevention.

The Osteoporosis Canada Tim Murray Short-Term Training Award will provide Matthew the opportunity to attend the Canadian Rheumatology Association Annual Scientific Meeting in February 2018. Attending this meeting will allow Matthew to not only participate in the CRA workshops and presentations, but also will provide him with an opportunity to network with rheumatologists with an interest in skeletal health. This will give Matthew a chance to build connections early on in his medical training to promote his development toward conducting future research.

"I'm very thankful to Osteoporosis Canada for the Tim Murray Short-Term Training Award. As I am just starting my medical training, I will greatly benefit from this invaluable learning opportunity to both enhance my understanding of osteoporosis and establish connections with other rheumatologists."

Dr. Ahmed Negm

"It is an honor to receive the 2017 Tim Murray Travel Award. I am currently a final year PhD Student in the Rehabilitation Science program, McMaster University."

At the annual meeting of the American Society for Bone and Mineral Research (ASBMR) in Denver, Colorado, I will present my project entitled "Comparisons of Hip Fractures Rates for a New Fracture Risk Scale in Adults Living in Long-term Care Across Canada". The purpose of this project is to compare hip fracture rates over one-year period among individuals living in long-term care (LTC) from three Canadian provinces for the eight fracture risk levels of our New Fracture Risk Scale. The current fracture risk assessment tools are not suitable for care planning for long-term care (LTC) residents. Fracture Rating Scale is a new clinical assessment tool to predict one-year fracture risk in LTC residents. Through one-on-one and small group discussions, I will be able to share knowledge and synthesize ideas about hip fracture detection and prevention in



long-term care residents. I will also discuss with the world leaders of osteoporosis the potential of incorporating our new fracture prediction tool internationally. Furthermore, integrating researchers and clinicians from a wide range of disciplines will provide me with broad clinical research training and solid foundation for embarking on an independent research career.



Summer 2017

2017 Tim Murray Travel Awards Cont'd

As a PhD student, I was drawn to the **ASBMR** meeting as a platform for me to build bridges across several disciplines and research groups who share a core vision to improve the bone and musculoskeletal health of older adults across the world. Attending the world's largest event in the field of osteoporosis, osteoarthritis and frailty aligns with my pursuit to acquire additional scholarly training to help manage concurrent and complex chronic conditions affecting older adults. My long-term goals are becoming a recognized clinical scientist in Canada and worldwide.

Osteoporosis Canada Tim Murray Travel Award will provide an exciting opportunity for me to attend the ASBMR annual meeting.

Garthiga Manickam



"I would like to express my gratitude to Osteoporosis Canada for selecting me as one of the recipients of the Tim Murray Short Term Award. This award will allow me to attend the 2017 International Conference on Children's Bone Health (ICCBH), in Würzburg, Germany, which will bring together leading scientists, physicians, and healthcare professionals working on bone health. This diversity in knowledge will broaden my understanding of the skeleton, ranging from basic molecular mechanisms that regulate skeletal development and its homeostasis, to bone diseases and scopes for treatment. The long-term objective of my work is to understand the mechanism of action of genes which are important for skeletal tissue development and regeneration. Towards this goal, I am working on a critical regulator of skeletal development, called sphingomyelin phosphodiesterase 3 (SMPD3). I will be presenting my work investigating "The regulation of Smpd3 expression in skeletal tissues and its role in fracture healing" at this conference.

Traumatic bone fractures can be a serious and frequent problem for patients suffering from osteoporosis. The promotion of new bone formation and mineralization can facilitate and shorten the time of

healing, as well as yield stronger union of the fractured bones. Our laboratory has identified important developmental roles of SMPD3, which include the promotion of apoptosis of hypertrophic chondrocytes and mineralization of both cartilage and bone extracellular matrix (ECM) in the developing skeleton. My recently published work shows that SMPD3 activity in both chondrocytes and osteoblasts is required for normal skeletal development. Since bone fracture healing involves a recapitulation of the steps seen during bone development, I hypothesized that mice lacking SMPD3 in chondrocytes and osteoblasts will adversely affect the process of fracture healing. The data that I will present at this conference provides the first line of evidence that the modulation of *Smpd3* levels at the bone fracture site promotes faster and better healing.



Summer 2017

2017 Tim Murray Travel Awards Cont'd

As a PhD student, my long-term research goals stem from the belief that to improve the health of the population, we need a detailed understanding of the biological processes that regulate the human body. By attending this conference, I will be able to further my knowledge in the field of musculoskeletal biology from the perspectives of highly influential scientists and clinicians working on diverse research topics investigating bone health. The "Meet the Expert Sessions" will be a great opportunity to network and discuss my research with senior investigators in this field. There are numerous sessions that are directly relevant to my study and research interest. These presentations will provide a rich, stimulating and interactive environment for critical thinking and knowledge building. This would also allow me to gain valuable input from other researchers, which would further enhance the quality of my studies and improve the visibility of my work. Thanks to the Tim Murray Short Term Award, I will gain a broad understanding of how to translate knowledge gained through basic and animal research into the clinical setting through interaction with experienced leading researchers at ICCBH."