



Osteoporosis Canada

Ostéoporose Canada

SAC Link

Osteoporosis Canada's Scientific Advisory Council

Fall 2015

Announcing New SAC Chair – Dr. Suzanne Morin



Dr. Suzanne Morin is the new chair of Osteoporosis Canada's Scientific Advisory Council. Suzanne has been involved with Osteoporosis Canada since 2004 as an active member of the Scientific Advisory Council, Chair of the Guidelines Committee and more recently member of the Board of Directors. In 2009, she received the Lindy Fraser Memorial Award in recognition for her contribution to osteoporosis education and research. Suzanne was instrumental in the development of the 2010 guidelines and their promotion and dissemination.

Dr. Morin graduated from the Faculty of Medicine at Université Laval de Québec, did her Internal Medicine specialty training and obtained a Master's in epidemiology and biostatistics from McGill University, where she is now Associate Professor in the Department of Medicine and member of the divisions of general internal medicine and endocrinology.

Dr. Morin's research program includes the evaluation of health-related outcomes of osteoporosis, particularly following hip fractures, the long-term safety of osteoporosis treatments, quality of care improvement and knowledge transfer. She is a scholar from the Fonds de Recherche du Québec en Santé, and has received funding from the Canadian Institutes of Health Research and other peer-reviewed agencies.

Osteoporosis Canada and the Scientific Advisory Council would also like to recognize and extend sincere thanks to Dr. Angela Cheung for her work and leadership as the SAC chair 2012-2015.

Please welcome Suzanne!

SAC Annual Donation

Act Now To Receive Your 2015 Tax Receipt

Now is a good time to join your fellow members of the Scientific Advisory Council in making your annual donation to Osteoporosis Canada. Your gift will help support research activities at Osteoporosis Canada including activities like publication of the Recommendations for Fracture Prevention in Long-Term Care, administration of the Research Awards and meetings for developing Atypical Femoral Fracture and Vertebral Fractures guidelines. Let's aim for 100% participation this year. You will be receiving an email from Suzanne which will have a link for making a gift on-line or you can make a gift right now:

- ⇒ By giving on line: www.osteoporosis.ca/Leadership
- ⇒ By sending a cheque to the National Office (address below).
- ⇒ By phone by credit card, to Rose Anne Mallett at (416) 696-2663 x2288

Thank you to everyone who has already made their gift in 2015.



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2015 Recommendations for Preventing Fracture in Long-Term Care

New guidelines aim to reduce fractures in seniors living in long-term care facilities

Osteoporosis Canada has released the first-ever national guidelines on preventing fractures in long-term care facilities, where fractures are significantly more common than among seniors in the community. The guidelines, entitled *Recommendations for Preventing Fracture in Long-Term Care*, offer healthcare professionals, residents of long-term care facilities and their families guidance to help them take measures to reduce immobility, pain, and hospital transfers, and to improve the quality of life for residents in long-term care.

The guidelines, published in *CMAJ (Canadian Medical Association Journal)*, were developed with input from residents of long-term care facilities and their families as well as researchers and health professionals. The *Recommendations for Preventing Fracture in Long-Term Care* were developed using the GRADE approach. The GRADE approach (Grading of Recommendations, assessment, development and Evaluation) is a method of grading the quality of evidence and the strength of recommendations in guidelines.

The lead author is Dr. Alexandra Papaioannou, Professor of Medicine, McMaster University, a geriatrician with Hamilton Health Sciences, Hamilton, Ontario. Other Scientific Advisory Council members who lent their expertise include Dr. A. Cheung, Dr. R. Crilly, Dr. S. Feldman, Dr. L. Giangregorio, Dr. S. Jaglal, Dr. R. Josse, Dr. S. Morin, Dr. H. Weiler and Dr. S. Whiting.

Seniors living in long-term care homes have a two- to four-fold risk of fractures, such as hip and spinal fractures as well as others, compared to adults of similar age living in the community. Fractures can impact quality of life, render people immobile and lead to early death. It is difficult to determine which frail seniors are at risk, as many have multiple conditions such as dementia, low kidney function and other issues that hinder risk assessment.

“One-third of older adults who experience hip fractures, and many others who experience different types of fracture, are residents in long-term care homes. Yet, in many cases, these fractures can be prevented,” said Dr. Papaioannou, lead author and Professor of Medicine, Division of Geriatric Medicine, McMaster University. “These recommendations fill a much needed gap in the current care of residents of long-term care homes, and will help improve the treatment and care for one of Canada’s most at-risk patient populations.”

These 2015 guidelines, based on current evidence, build on the *2010 Clinical Practice Guidelines for the Diagnosis and Management of Osteoporosis in Canada* that focus on people living in the community and do not include this frailer group of seniors. The guidelines weigh the benefits and risks of each recommendation for frail seniors, accounting for various health conditions such as kidney function, ability to swallow and more.

The guideline outlines five strategies to prevent fractures in residents of long-term care homes. These include: vitamin D and calcium intake, hip protectors, exercise, multifactorial interventions to prevent falls and osteoporosis medications.

“The goal of fracture prevention is to prevent loss of mobility, serious injury, pain, transfers to acute care and ultimately to maximize opportunities for quality living among long-term care residents,” conclude the guideline’s authors.

A link to the guidelines is on the OC website as well as an electronic toolkit containing:

- a. a quick reference guide (this is a decision tool with the recommendations);
- b. an order set;
- c. a series of video clips highlighting residents’ and families’ stories, and clinical pearls provided by a variety of osteoporosis and long-term care experts; and
- d. a PowerPoint presentation highlighting the recommendations.

<http://www.osteoporosis.ca/health-care-professionals/long-term-care/>



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Lindy Fraser Award Winner 2015

Osteoporosis Canada's Scientific Advisory Consultants and Osteoporosis Canada, would like to announce this year's Lindy Fraser Award winner as chosen by the members of the SAC.

Osteoporosis Canada established this award in 1993 to recognize individuals who have made an outstanding contribution to the field of osteoporosis research and education in Canada. The award is named in honour of Lindy Fraser, who in 1981 at the age of 87, started the first self help group for people with osteoporosis. She herself was an inspiration to others as she shared her struggle to get out of bed, into a wheelchair, then to walk again with a cane. In 1982, she answered a call from a small group in Toronto to take part in the first national symposium on osteoporosis. That appearance was the spark that gave rise to Osteoporosis Canada.

This year's award winner has shown immeasurable dedication and determination in the collaborative effort to achieve the common vision of Canada without osteoporotic fractures. Osteoporosis Canada is happy to recognize **Dr. Heather Frame** as the 2015 Lindy Fraser Award Winner.



Dr. Frame received her medical education at the University of Manitoba and is a Certificant of the College of Family Physicians of Canada. Dr. Frame worked as a Family Physician in Toronto for 2 years before returning to Winnipeg where she has practiced since 1985. Currently she practices Family Medicine at the Assiniboine Clinic as well as working in the Mature Women's Center Osteoporosis Clinic, Victoria Hospital, Winnipeg. Dr. Frame is a committee member for the Manitoba Bone Density Program.

Dr. Frame has worked with the OC Board as well as the SAC. She worked with SAC on the development of the 2005 update to the 2002 Guidelines and officially joined the SAC in 2005. She has worked on a number of publications and committees including having been Co-chair of the new Knowledge Translation Committee and currently sits on the Guidelines Committee. In the past, she has served on the OC SAC Executive Committee. Heather was key in the development of the paper in 2013 published in CARJ entitled Improving the Management of Osteoporosis Through Simple Changes in Reporting Fragility Fractures done in conjunction with the CAR. She went on to present a poster at IOFISCD on the same subject. Currently, she is the Vice Chair of the OC Board of Directors which she joined in 2010. She is on the Board Development Committee and the Strategic Planning sub-committee. Dr. Frame has also done multiple CME events for Physicians and Public Forums on Osteoporosis.

Dr. Frame is a voice for Primary Care and its role in the management of osteoporosis.

Congratulations Dr. Frame!



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Osteoporosis Canada – CaMos Fellowship Research Award Update

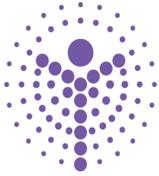
Dr. Andy Kin On Wong 2014 Award Recipient

With the Osteoporosis Canada – CaMos Fellowship Award, Dr. Andy Kin On Wong completed his first preliminary analysis of the Canadian Multicentre Osteoporosis Bone Quality Study (CaMos BQS). This head-to-head comparison of low and high-resolution CT scans for imaging bone structure examined 820 women across 6 cities in Canada. Each completed either or both of these scans in addition to bone density imaging as the standard of care. His findings showed that less intact trabecular architecture at the ankle and wrist are associated with 30 to 55% increase in the odds for any osteoporotic fractures. In particular, the low-resolution and less costly CT scanner yielded measures that better associated with fractures at the ankle than the higher-resolution scanner. On the other hand, the higher resolution scanner showed wrist bone properties that better associated with fractures than the lower resolution scanner. These results suggest that we may not need fancier and more expensive technology to examine bone structure and that less information may still inform us on differences in fracture risk. These results will need to be repeated when his study has completed the full 5 years of follow-up.

While continuing to follow study participants for the CaMos BQS, Dr. Wong has been actively investigating bone structural properties in individuals with atypical femur fractures (AFFs). These are fractures that occur in the middle of the thigh and happen unexpectedly with low trauma. While AFFs happen even in some individuals who are not on treatment, recent evidence suggests that a very small percentage of people who have taken certain osteoporosis medications for a very long time develop AFFs. There is therefore motivation to find risk factors for AFFs and to screen individuals who have been on osteoporosis medications for long durations. To achieve this goal, Dr. Wong explored bone properties at the mid-thigh among 150 patients who recently developed an AFF, and compared them to over 3000 women who have not developed an AFF. His analyses revealed that the thigh bone of women who recently developed an AFF showed a thicker and denser shell than those who have not. He then proceeded to examine the ankle and wrist bones and saw that despite observing a similar pattern with thicker and denser exterior shells of the wrist and ankle bones, those with an AFF had conversely, less intact trabecular architecture. These results point to the potential explanation that bone in this small group of individuals who have taken osteoporosis medications for a long time may have over-accumulated mineral in the exterior shell, leading to greater brittleness. Further studies combining other cohorts of patients with AFFs around the world will be necessary to replicate these findings.

Aside from his focus on bone, Dr. Wong is leading investigations in muscle, which interact with bone to help maintain its strength whilst preventing individuals from falling and fracturing. From mid-leg muscle CT scans that he also obtained from the CaMos cohort described above, he was able to link individuals with smaller muscles and fatter muscles to being frailer. This analysis suggests that improving muscle quality may help prevent individuals from becoming frail, which may be a prerequisite to falling and fracturing a bone. Further examining ways to improve muscle quality, Dr. Wong conducted a secondary analysis of a vitamin K trial in 470 postmenopausal women and found that those who were given 5 mg/day of vitamin K1 showed better translation of mid-leg muscle density to improved balance and mobility. Vitamin K1 is found in dark leafy greens. By elevating vitamin K1 intake, we may be able to better harness our existent muscles to yield function. Because these analyses were not planned prior to conducting the vitamin K1 clinical trial, a new study must be performed to confirm these findings.

These above studies have recently been presented by Dr. Wong at the American Society for Bone and Mineral Research meeting in Seattle, WA, USA. He will be finalizing these studies for publication soon in high impact scientific journals.



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Celebrating Osteoporosis Month: Patient Video Series on Exercise and Osteoporosis

Osteoporosis Canada is excited to announce a video series on exercise and osteoporosis for Osteoporosis Month, developed in partnership with the University of Waterloo and the Geriatric Education and Research in Aging Sciences Centre. Each day, from Monday to Friday, for the month of November, we will post a new video to provide ideas for safe and effective exercise and physical activity. We will start our video series telling the stories of four very different people with osteoporosis and showing you their innovative solutions to keep healthy and active. Which one will speak to you? **Tune in** from November 2nd at www.osteoporosis.ca/exercise-videos/ to find out!

SAC Committee Membership 2015

SAC Executive Committee: Suzanne Morin, Chair; Sandra Kim, Vice Chair; Angela Cheung, Past Chair; Earl Bogoch; Sid Feldman; Stephanie Kaiser; Aliya Khan; Sumit Majumdar; Heather McDonald-Blumer; Alexandra Papaioannou; Rowena Ridout; Wendy Ward

SAC Guidelines Committee: Heather McDonald-Blumer, Chair; Suzanne Morin; Heather Frame; Lisa Anne Fraser; Robert Josse; Sandra Kim; Bill Leslie; Sumit Majumdar; Lynn Nash; Alexandra Papaioannou; Lianne Tile; Larry Finnell(COPN)

SAC Research Committee: Wendy Ward, Chair; Suzanne Morin; Mohit Bhandari; Debra Butt; Suzanne Cadarette; Susan Jaglal; Angela Jubly; Norma McIntyre; Christine Thomas(COPN)

SAC Development Committee: Alexandra Papaioannou, Chair; Suzanne Morin; Stephanie Atkinson; Sabrina Gill; David Goltzman; David Hanley; Rowena Ridout;

SAC Knowledge Translation Core Committee: Stephanie Kaiser, Co-Chair; Sandra Kim, Co-Chair; Mohit Bhandari; Heather Frame; Aliya Khan; Monica Menecola; Lynn Nash; Ted Tufescu; Ravi Jain (OC);

Rapid Response Team: Aliya Khan; Suzanne Morin; Sandra Kim

COPN Response: Rowena Ridout; Maureen Ashe

Osteoporosis Canada Office is Moving!!

We are moving!

As of Nov. 30, we will be at our new location:

**500-1200 EGLINTON AVE E
NORTH YORK ON M3C 1H9**

Our contact numbers remain the same:

Phone (1) 416-696-2663 ext 2255 | Fax 416-696-2673 | English toll free: 1-800-463-6842 | French toll free: 1-800-977-1778