

2018 KRAKOW

Saturday, April 21<sup>st</sup>



Pr. Jean-Yves Reginster & Pr. John A. Kanis

## DEAR GUEST,

It is an honour and a great privilege to welcome you to this World Congress on Osteoporosis, Osteoarthritis and Musculoskeletal diseases jointly organised by the International Osteoporosis Foundation (IOF) and the European Society for Clinical and Economic Aspects of Osteoporosis and Osteoarthritis (ESCEO). This WCO-IOF-ESCEO 2018 congress, which is held in Krakow, Poland, between April 19 and April 22, is the largest event worldwide, fully dedicated to the clinical and economic aspects of osteoporosis, osteoarthritis and musculoskeletal diseases and gathers more than 3,900 delegates.

The Scientific Advisory Committee, co-chaired by Professor René Rizzoli and Professor Cyrus Cooper, had an extremely difficult task, to select oral presentations, among more than 1,513 submitted abstracts of the highest quality.

During this congress, prestigious scientists, from all parts of the world, will give you the opportunity of being in touch with the latest scientific developments in various fields. We expect that researchers and clinicians from around the world will experience a diversified and enriching scientific meeting. The final programme includes:

- | Stimulating plenary lectures on various 'hot' topics delivered by the fields' leading experts;
- | Clinically-focused Meet-the-Expert Sessions, restricted in the number of participants to enable more effective interactions;
- | A large number of special sessions such as the Educational Lecture, the Oral Communication of Selected Poster, the symposiums of scientific organisations (i.e. World Health

Organization, International Osteoporosis Foundation, European Society for Clinical and Economic Aspects of Osteoporosis, Osteoarthritis and Musculoskeletal Diseases, European Union Geriatric Medicine Society), or the Committee of National Societies Special Plenary session;

- | For the third time and because of the huge success of the past two years, 29 non-sponsored workshops selected by a panel chaired by the Scientific Chairs of the Congress, and endorsed according to their topicality and quality.

Many satellite symposia will take place. Their programmes have been carefully reviewed by the organisers to make sure that an appropriate amount of unbiased science will be outlined.

We are convinced that you will enjoy this congress, in the beautiful surroundings of Krakow and that the key messages that you will take home after the meeting will help you in your daily practice for the benefit of your patients.

We wish you a very successful meeting.

John A. Kanis  
Co-chairman



Jean-Yves Reginster  
Co-chairman




Pr. Cyrus Cooper



Pr. René Rizzoli





## HIGHLIGHTS OF THE MEETING

The WCO-IOF-ESCEO congress, here in Krakow, is the largest meeting in the field of osteoporosis, osteoarthritis and musculoskeletal diseases, with more than 3,900 attendees seeking information on the epidemiology, pathogenesis, prevention, and treatment of these important public health problems. Over 1,500 abstracts were submitted addressing all these topics. During the first two days of the congress, many important and interesting communications have been presented either orally or as poster communications. We highlight here only a small part of all the science thus far presented during the congress.

The meeting began on Thursday April 19 with the lecture from René Rizzoli that reviewed the best clinical articles published in 2017. After the official opening ceremony, Islene Araujo de Carvalho, from the World Health Organization (WHO), discussed current projects led by the organization and more particularly the WHO Clinical Consortium and Health Ageing.

On Friday, the scientific session started with the plenary lecture of Cyrus Cooper that reviewed the FRAX risk assessment tool, developed to characterise the 10-year absolute risk of hip or major osteoporotic fracture in an individual, and thereby assist in the most effective targeting of such treatments (PL1). He noted that the calibration and discrimination characteristics of the FRAX algorithm have been well established, but there is less consistency in the use of FRAX to set intervention thresholds for treatment in different healthcare settings.

Along the same theme as the plenary lecture, Dr Parsons showed that systematic fracture risk screening using FRAX leads to markedly greater use of anti-osteoporosis medication and greater adherence, in women at high fracture risk, compared with usual care (OC6). She noted that these findings inform public health strategies aimed at reduction of fragility fractures.

Yesterday morning, a substantial part of the oral communications was related to the management of osteoporosis. For example, Jean-Yves Reginster presented a network meta-analysis suggesting that abaloparatide treatment resulted in a greater reduction in relative risk of both vertebral and nonvertebral fractures in postmenopausal osteoporosis versus placebo in comparison with other treatment options (OC1). In another communication, it was also shown that abaloparatide was a cost-effective alternative to teriparatide, denosumab and generic alendronate in patients at high risk of fragility fractures (OC3). Another study, based on 4 clinical trials, suggested greater increases in BMD and reductions in bone turnover in transitioning from oral bisphosphonates to denosumab, compared with continuing on or cycling through bisphosphonates (OC8).

Serge Ferrari discussed bone microstructure as a determinant of bone fragility above and beyond bone mineral mass during the second plenary lecture (PL2). Two oral communications were somehow related to this lecture. In the first, Dr Mary Bouxsein presented results suggesting that local osteo-enhancement procedure to deliver a novel triphasic calcium based implant to the proximal femur in osteoporotic women can substantially increase proximal femoral strength for a sideways fall, the effect starting soon after treatment and persisting for at least 5–7 years (OC7). In the second one, it was shown that

romosozumab treatment for 12 months led to an improved microarchitecture, as judged by iliac crest bone biopsies (OC12).

Osteoarthritis was also extensively covered yesterday, starting with the plenary lecture of Philip Conaghan discussing new perspectives of its management (PL3). In relation to this lecture, the results of the phase 2a study on the effect of SM04690, a small molecule Wnt pathway inhibitor, was presented for the very first time and showed that while the primary endpoint was not met, pain, function and joint structure were significantly improved over placebo (OC4). In another study, it was observed that multi-modal targeted bone loading program that improved bone density and bone microarchitecture had no adverse effects on knee cartilage structure (OC14). The recommendations of the World Health Organization that older adults should do at least 150 minutes of moderate-intensity aerobic physical activity throughout the week or do at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week could then be fulfilled without risk for the cartilage's health.

Another important session of yesterday's meeting was the IOF Committee of the National Societies (CNS) Special Plenary Session on the important topic from a public health point of view: "Clinical, social, ethical and economic burden of osteoporosis and fragility fractures". Interestingly, during this session, much time was devoted to short but intensive presentations of study results from different member societies.

It should also be highlighted that 3 important sessions took place yesterday and were well attended :

1. Principles for the engagement of patients in the preparation of clinical and regulatory guidelines: outcomes of an experts' consensus meeting organized by the WHO and ESCEO.
2. Assessment of Physical Performance in daily clinical practice: Outcomes of an Experts' consensus meeting organized by ESCEO under the auspices of the WHO
3. Nutrition and physical activity in the prevention and treatment of sarcopenia: Outcomes of the IOF-ESCEO sarcopenia Working Groups.





## ESCEO MEDAL OF EXCELLENCE 2018

Dr Mickael Hiligsmann, Assistant Professor in Health Economics and Health Technology Assessment at Maastricht University, was announced the winner of the ESCEO Medal of Excellence. The prestigious award honours an academic who has contributed significantly to the field of osteoporosis and musculoskeletal science through original and outstanding scientific contributions.

Dr. Mickael Hiligsmann holds a PhD in Health, Medicine and Life Sciences from Maastricht University (2015), a PhD in Medical Sciences (2010), a master in Public Health (2006) and a master in Economics (2003) from the University of Liège. His main research interests include health technology assessment, cost-effectiveness analyses, valuation of health care (e.g. discrete-choice experiments, best-worst scaling), patients involvement and medication adherence. He has been co-promotor of about 12 PhD students and is senior lecturer in health technology assessment and health economic courses at Maastricht University. Mickael has published about 140 scientific articles of which 60 have been conducted in the field of osteoporosis and osteoarthritis. He is a member of the scientific committees of IOF and ESCEO since several years, has (co-) chair several ESCEO-IOF working groups and is, among others, member of the editorial board of Osteoporosis International and Archives of Osteoporosis.



Dr Mickael Hiligsmann stated: "It is a great honor and privilege to receive this Award. I am extremely grateful to the hard work of so many excellent team members and collaborators who have contributed to these researches and this

Award represent a wonderful recognition of the importance of economic evaluation and health technology assessment to optimize the treatment outcomes of our patients. We shall continue our efforts to help policy makers to efficiently allocate healthcare resources devoted to osteoporosis as well as to better understand how medication adherence and patient involvement in decision making could be improved in osteoporosis and other musculoskeletal conditions".

## HERBERT FLEISCH MEDAL 2018

The European Society for Clinical and Economic Aspects of Osteoporosis and Osteoarthritis (ESCEO) and the International Osteoporosis Foundation (IOF) are proud to announce that Doctor Charlotte Beaudart has been awarded the ESCEO-IOF Herbert A. Fleisch Medal. Herbert Fleisch was a renowned researcher whose groundbreaking work contributed to the development of scientific knowledge about bone diseases and their treatment.

Charlotte Beaudart obtained her PhD degree in Public Health Sciences in December 2016 and works now as Adjunct Professor in the Department of Public Health, Epidemiology and Health Economics at the University of Liège in Belgium. Her main domain of interest is sarcopenia with a thesis entitled "Contribution to the study of sarcopenia: definition, diagnosis and outcomes". She has expertise in methodology, systematic reviews, meta-analyses, epidemiological surveys, development and validation of Patients Reported Outcomes (PROMs). At only 29 years, she is author of more than 50 scientific publications. Finally, Dr. Beaudart is member of the Scientific Advisory Board of the European Society on Clinical and Economic Aspects of Osteoporosis and Osteoarthritis (ESCEO) and Associate Editor of two journals; "Aging Clinical and Experimental Research" and "BMC Musculoskeletal Disorders".



Professor Kanis went on to state: "This award appropriately recognizes an individual whose work has influenced knowledge about musculoskeletal disorders. Within these last few years,

Charlotte Beaudart has contributed significantly to the general management of sarcopenia and continues to do so."



## THE OLOF JOHNELL SCIENCE AWARD

The Olof Johnell Science Award, named in honour of the late Professor Olof Johnell, honours an individual who has contributed to the field of osteoporosis in a scientific or policy implementation area, worldwide.

This year, the Award is given to Professor Cyrus Cooper who is Professor of Rheumatology and Director of the MRC Lifecourse Epidemiology Unit; Vice-Dean of the Faculty of Medicine at the University of Southampton; and Professor of Epidemiology at the Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences, University of Oxford. He leads an internationally competitive programme of research into the epidemiology of musculoskeletal disorders, most notably osteoporosis. He is President of the International Osteoporosis Foundation; Chair of the BHF Project Grants Committee; an emeritus NIHR Senior Investigator; and Associate Editor of Osteoporosis International. He has previously served as Chairman of the Scientific Advisors Committee,

International Osteoporosis Foundation; Chairman, MRC Population Health Sciences Research Network; Chairman of the National Osteoporosis Society of Great Britain; past-President of the Bone Research Society of Great Britain; and has worked on numerous Department of Health, European Community and World Health Organisation committees and working groups. He has published extensively (over 900 research papers; h-index=119) on osteoporosis and rheumatic disorders and pioneered clinical studies on the developmental origins of peak bone mass. In 2015, he was awarded an OBE for services to medical research.

Professor Cooper stated: *"It is an honour and privilege to receive this Award. It is also testimony to the hard work of so many excellent team members and collaborators who have contributed to our research programme, as well as the institutions that have provided such welcome support. We shall continue our efforts to understand the*



*causes and develop preventive strategies against the consequences, of osteoporosis and other disabling musculoskeletal conditions."*

## IOF MEDAL OF ACHIEVEMENT 2018

The IOF Medal of Achievement honours an individual who has made a significant and unstinting contribution to the advancement of the work of the IOF, through furthering one or more of the mission statements and/or goals of the Foundation. The winner of this prestigious award is Professor Nick Harvey. The award ceremony was held on Thursday, during the opening ceremony of the congress.

Nicholas Harvey is Professor of Rheumatology and Clinical Epidemiology at the MRC Lifecourse Epidemiology Unit, University of Southampton, UK, having originally trained in medicine at

the Universities of Oxford and Cambridge. He is Vice-Chair of the International Osteoporosis Foundation Committee of Scientific Advisors, and he co-leads an MRC programme focused on the lifecourse epidemiology of bone and joint disease. He has won many national/international prizes, such as the National Osteoporosis Society Kohn Award, is an investigator on >£50m grant funding and has published over 160 peer-reviewed papers (H-index 44). He serves as an associate editor for Frontiers in Bone Endocrinology and Archives of Public Health, and on the editorial boards of Bone and Osteoporosis International. He reviews regularly for JBMR,

Bone, Osteoporosis International, Lancet, BMJ, NEJM, and for funding bodies such as UK Medical Research Council, NIHR, INSERM.

Professor Cyrus Cooper, when presenting the Award, stated, *"The current research of Nick Harvey incorporates a lifecourse approach to the characterization of the epidemiology and determinants of osteoporotic fracture from cradle to grave, elucidation of underlying mechanisms, and development of novel interventions. His experience in the field has been of great value to the International Osteoporosis Foundation and to the greater osteoporosis community as a whole."*

## ESCEO-AGNOVOS HEALTHCARE YOUNG INVESTIGATOR AWARDS

ESCEO has the pleasure inform you that the individuals listed below have been selected for the ESCEO-AgNovos Healthcare Young Investigator Awards. They have been carefully chosen based on the quality of their abstract related to bone strength, bone quality, falls risk, primary or secondary fracture prevention or multi-disciplinary post-fracture care.

The young investigators are: Fanny Buckinx, Elizabeth Curtis, Nicholas Fuggle, Anna Litwic, Médéa Locquet, Gemma Marcucci, Camille Parsons, Kieran Reid, Danielle Robinson, Yi Yang.







2019 PARIS

WORLD CONGRESS ON OSTEOPOROSIS,  
OSTEOARTHRITIS AND  
MUSCULOSKELETAL DISEASES



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