2010 World Congress on Osteoarthritis

2010 World Congress Scientific Program

Thursday, September 23, 2010

10:00 AM–12:00 PM  Pre-Congress Workshop
Evolving Evidence and Recommendations for the Management of Osteoarthritis of the Knee and Hip

12:30 PM–2:00 PM  Satellite Lunch Symposium
Current Perspectives on the Clinical Use of Glucosamine Sulfate as a Disease Modifying Agent in Osteoarthritis
Sponsored by Rottapharm

2:00 PM–2:15 PM  Welcome from President and Congress Chairs

2:15 PM–3:30 PM  Plenary Session 1

2:15 PM–2:45 PM  New Mechanism of Cartilage Degradation
Hideaki Nagase, PhD

2:45 PM–2:55 PM  001 An Alternately Spliced Transcript of ADAMTS4 in Human Osteoarthritis Synovium
S.D. Wainwright1, J. Bondeson2, C. Hughes1, B. Caterson1
1Cardiff Sch. of BioSci., Cardiff, United Kingdom; 2Dept. of Rheumatology, Cardiff University, United Kingdom

2:55 PM–3:05 PM  002 Matrixase Is a Novel Initiator of Cartilage Matrix Resorption in Osteoarthritis
1Newcastle Univ., Newcastle upon Tyne, United Kingdom; 2Univ. of East Anglia, Norwich, United Kingdom;
3Université de Sherbrooke, Quebec, QC, Canada; 4Royal Infirmary, Glasgow, United Kingdom; 5Univ. of Strathclyde, Glasgow, United Kingdom; 6Univ. of the West of Scotland, Paisley, United Kingdom

3:05 PM–3:15 PM  003 Stimulation of MMPs and Cartilage Degradation by S100A8 and S100A9
A.E. van Hummel1,2, H. Zreiqat1, M.M. Smith2, T. Vogl1, J. Roth3, C.B. Little2
1Tissue Engineering & Biomaterials Unit, Faculty of Engineering, Univ. of Sydney, Sydney, Australia; 2Raymond Purves Bone & Joint Res. Lab., The Kolling Inst. of Med. Res., Univ. of Sydney, Royal North Shore Hosp., Sydney, Australia; 3Inst. of Immunology, Univ. of Muenster, Muenster, Germany

3:15 PM–3:25 PM  004 Calpain Is Involved in C-Terminal Truncation of Human Aggrecan
A. Struglics, M. Hansson
Lund Univ., Dept. of Orthopedics, Clinical Sci., Lund, Sweden

3:30 PM–4:00 PM  Break

4:00 PM–5:15 PM  Plenary Session 2

4:00 PM–4:30 PM  Non Pharmalogical Clinical Trials in OA
Philippe Ravaud, MD, PhD

4:30 PM–4:40 PM  005 Benefits of Massive Weight Loss on Symptoms, Systemic Inflammation and Cartilage Turnover in Obese Patients with Knee Osteoarthritis
1Hôpital Lariboisière, Paris, France; 2Hôpital La Pitié, Paris, France; 3Inserm 664, Lyon, France; 4Hôpital Hotel-Dieu, Paris, France; 5Hôpital Henri-Mondor, Créteil, France

4:40 PM–4:50 PM  006 Effects of Lateral Wedge Insoles on Symptoms and Structural Disease Progression in Medial Knee Osteoarthritis: A 12-Month Randomised Controlled Trial
K.L. Bennett1, K.-A. Bowles1, C. Payne2, F.M. Cucitiini3, E. Williamson1, A. Forbes3, F. Hanna3, R.S. Hinman1
1Univ. of Melbourne, Melbourne, Australia; 2La Trobe Univ., Melbourne, Australia; 3Monash Univ., Melbourne, Australia

4:50 PM–5:00 PM  007 Intrarticular IL1-Ra After Acute Knee Injury Decreases Biomarkers of Inflammation and Improves Pain and Function
Duke Univ., Durham, NC
5:00 PM–5:10 PM 008 BONE MARROW LESIONS, CARTILAGE LOSS, AND PAIN IN KNEE OSTEOARTHRITIS: RESULTS FROM A RANDOMIZED CONTROLLED CLINICAL TRIAL USING MRI  
L.M. Wildi1, J.-P. Raynauld1, J. Martel-Pelletier1, F. Abram2, M. Dorais3, J.-P. Pelletier1  
p. S12

5:15 PM–5:45 PM BREAK

5:45 PM–6:30 PM OPENING CEREMONY/LIFETIME ACHIEVEMENT, BASIC AND CLINICAL AWARD PRESENTATIONS

6:30 PM–6:50 PM I-01 Meta-epidemiology: Building the Bridge from Research Evidence to Clinical Practice  
Weiya Zhang, MSC, PhD  
p. S1

6:50 PM–7:10 PM I-02 Keynote Presentation – Cartilage Inside Out  
Anthony Robin Poole, PhD, DSc  
p. S1

7:15 PM–8:45 PM OPENING RECEPTION WITH EXHIBITORS

Friday, September 24, 2010

7:30 AM–9:00 AM Satellite Breakfast Symposium  
STRUCTURE DISEASE MODIFICATION IN OSTEOARTHRITIS: TARGETING THE WHOLE JOINT  
Sponsored by Bioberinga

8:00 AM–9:00 AM Breakfast Workshop A  
I-03 USING MICROARRAYS TO INFORM LABORATORY AND CLINICAL PRACTICE  
Christopher Murphy, BSc, PhD  
p. S1

8:00 AM–9:00 AM Breakfast Workshop B  
I-04 INTRAARTICULAR THERAPIES IN THE MEDICAL MANAGEMENT OF OA  
Thierry Conrozier, MD PhD  
p. S2

9:00 AM–10:30 AM Plenary Session 3

9:00 AM–9:30 AM Obesity and OA: From Mechanisms to Clinical Aspects  
Stephen Messier, PhD

9:30 AM–9:40 AM 009 THE ASSOCIATION OF PREVALENT CARTILAGE DAMAGE AND CARTILAGE LOSS OVER TIME WITH INCIDENT BONE MARROW EDEMA-LIKE LESIONS AT THE TIBIOFEMORAL COMPARTMENTS: THE MOST STUDY  
M.D. Crema1,2, F.W. Roemer1,2, K. Wang1, D.T. Felson1, M.D. Marra1,4, M.C. Nevitt5, J.A. Lynch5, J. Torner5, C.E. Lewis7, A. Guermazi1  
1Boston Univ. Sch. of Med., Boston, MA; 2Inst. of Diagnostic Imaging (IDI) and Radiology Div., Univ. of São Paulo at Ribeirão Preto, Ribeirão Preto, Brazil; 3Klinikum Augsburg, Augsburg, Germany; 4Inst. of Diagnostic Imaging (IDI), Ribeirão Preto, Brazil; 5Univ. of California at San Francisco, San Francisco, CA; 6Univ. of Iowa, Iowa City, IA; 7Univ. of Alabama, Birmingham, AL  
Young Investigator Award Winner  
p. S12

9:40 AM–9:50 AM 010 IS FOLLISTATIN-LIKE 3 OR FSTL3 NECESSARY FOR JOINT HEALTH?  
B. Poulet, J. Mcneil, A.A. Pitsillides  
The Royal Vet. Coll., London, United Kingdom  
Young Investigator Award Winner  
p. S13

9:50 AM–10:00 AM 011 PROINFLAMMATORY AND CATABOLIC ROLE OF LEPTIN IN OSTEOARTHRITIS. CORRELATION WITH IL-6, MMP-1 AND MMP-3 IN SYNOVIAL FLUID AND EFFECTS IN HUMAN OA CARTILAGE  
A. Koskinen1, K. Vuolteenaho1, R. Nieminen1, T. Moilanen1, E. Moilanen1  
1The Immunopharmacology Res. Group, Med. Sch., Univ. of Tampere and Tampere Univ. Hosp., Tampere, Finland; 2Coxa Hosp. for Joint Replacement, Tampere, Finland  
Young Investigator Award Winner  
p. S13

10:00 AM–10:10 AM 012 FUNCTIONAL CHARACTERIZATION OF OA RISK POLYMORPHISM RS225014 AT DI02 IN HUMAN OA CARTILAGE  
S.D. Bos1,2, J. Loughlin3, R.G. Nelissen1, P.E. Slagboom1,2, I. Meulenbelt1,2, E. Moilanen1  
1LUMC, Leiden, Netherlands; 2Netherlands Consortium for Healthy Ageing, Leiden, Netherlands; 3Newcastle Univ., Newcastle, United Kingdom  
Young Investigator Award Winner  
p. S14

10:10 AM–10:20 AM 013 THE INFRAFATAL FAT PAD OF OSTEOARTHRITIC PATIENTS HAS AN INFLAMMATORY PHENOTYPE  
L.R. Klein-Wieringa1, M. Kloppenburg1, Y.M. Bastiaansen-Jenniskens2, E. Yusal1, J.C. Kwekkeboom1, H. El-Bannoudi1, R.G. Nelissen1, A.-M. Zuurmond2, V. Stojanovic-Susulic4, G.J. van Osch1, R.E. Toes1, A. Ioan-Facsinay1  
1Leiden Univ. Med. Ctr., Leiden, Netherlands; 2Erasmus MC, Univ. Med. Ctr., Rotterdam, Netherlands; 3TNO Quality of Life, Leiden, Netherlands; 4Centocor, Philadelphia, PA  
Young Investigator Award Winner  
p. S14
10:20 AM–10:30 AM

014 A COMPOSITE SCORE OF MULTI-JOINT RADIOGRAPHIC OSTEOARTHRITIS: THE JOHNSTON COUNTY OSTEOARTHRITIS PROJECT
A.E. Nelson¹, R.F. DeVellis¹, J.B. Renner¹, P.G. Conaghan², V.B. Kraus³, J.M. Jordan¹
¹Univ. of North Carolina, Chapel Hill, NC; ²Univ. of Leeds, Leeds, United Kingdom; ³Duke Univ. Med. Ctr., Durham, NC
Young Investigator Award Winner

10:30 AM–11:00 AM

OARSI Business Meeting

11:00 AM–11:30 AM

BREAK

11:30 AM–12:30 PM

Concurrent Session 1

ANIMAL MODELS AND MECHANOBIOLOGY

11:30 AM–12:00 PM

I-05 Post-Traumatic OA
Stefan Lohmander, MD, PhD

12:00 PM–12:30 PM

I-06 Endochondral Ossification Signal: A Potential Therapeutic Target for Osteoarthritis
Hiroshi Kawaguchi, MD, PhD

12:30 PM–2:00 PM

Satellite Lunch Symposium

ACHIEVING EFFECTIVE OA MANAGEMENT: NEW INSIGHTS FOR CHONDROITIN SULFATE
Sponsored by IBSA

2:00 PM–3:30 PM

Concurrent Session 3

IMAGING AND JOINT MORPHOMETRY

2:00 PM–2:30 PM

I-07 Imaging in OA: What have we learned and where are we going?
Frank Roemer, MD

2:30 PM–4:00 PM

021 RESPONSIVENESS AND RELIABILITY OF MRI IN OSTEOARTHRITIS: ANALYTIC LITERATURE REVIEW
D.J. Hunter¹, W. Zhang², P.G. Conaghan³, K. Hirko², L. Menashe³, W.M. Reichmann³, E. Losina³
¹Univ. of Sydney, St Leonards, Australia; ²Univ. of Nottingham, Nottingham, United Kingdom; ³Univ. of Leeds, Leeds, United Kingdom; ⁴New England Baptist Hosp., Boston, MA; ⁵Brigham and Womens Hosp., Boston, MA
5:30 PM–5:40 PM 033 EFFECTS OF FEEDING A HIGH OMEGA-3 FATTY ACID DIET ON THE PAIN-RELATED DISABILITY IN DOGS WITH NATURALLY OCCURRING OSTEOARTHRITIS  
M. Moreau, É. Troncy, D. Gauvin, B. Lussier  
Université de Montréal, St-Hyacinthe, QC, Canada  

5:40 PM–5:50 PM 034 CENTRAL SENSITIZATION IN KNEE OA: PRELIMINARY RESULTS FROM THE MOST STUDY  
T. Neogi1, J. Niu1, L. Arendt-Nielsen2, J. Scholz3, L. Frey-Law4, C. Woolf5, Y. Zhang1, L. Bradley5, M. Nevitt6, D. Felson1  
1BLSM, Boston, MA; 2Univ. of Aalborg, Aalborg, Denmark; 3Childrens Hosp., Boston, MA; 4Ulua, Iowa City, MA; 5UAB, Birmingham, AL; 6UCSF, San Francisco, CA  

5:50 PM–6:00 PM 035 DESTABILIZATION OF THE MEDIAL MENISCUS AS A MODEL FOR THE STUDY OF PAIN PATHWAYS ASSOCIATED WITH DEVELOPMENT OF MURINE OSTEOARTHRITIS  
R. Das1, A. Plaas1, J.D. Sandy1, M.D. Tortorella1, A.-M. Malfait1  
1Rush Univ. Med. Ctr., Chicago, IL; 2Gwoangzhou Inst. of BioMed. Hth., Guangzhou, China  

6:00 PM–6:10 PM 036 RUNT-RELATED TRANSCRIPTION FACTOR 2 ALLELES AND KNEE CARTILAGE LESIONS ARE ASSOCIATED WITH INCREASES IN KNEE PAIN OVER 5 YEARS IN OLD ADULTS  
C. Ding1, A. Stephens2, F. Cicuttini3, N. Morrison2, G. Jones1  
1Univ. of Tasmania, Hobart, Australia; 2Griffith Univ. Gold Coast Campus, Gold Coast, Australia; 3Monash Univ., Melbourne, Australia  

6:10 PM–6:20 PM 037 THE CATHEPSIN K INHIBITOR AZ12606133 REDUCES ARTICULAR CARTILAGE BREAKDOWN AND JOINT PAIN IN OSTEOARTHRITIC KNEES  
J.J. McDougall1, N. Schuele1, J. Bowyer2  
1Univ. of Calgary, Calgary, AB, Canada; 2AstraZeneca, Loughborough, United Kingdom  

6:20 PM–6:30 PM 038 MMP-13 INHIBITORS REDUCE NOCICEPTION IN A RAT MODEL OF OSTEOARTHRITIS  
R.A. Black1, C. Gabel1, S. Livelly2, M. Toteva2, P. Fan2, J. Tocxer1, J. Hulme1, A. Bendele3, R. Whiteside4, J. Henry3  
1Amgen, Seattle, WA; 2Amgen, San Francisco, CA; 3Arthroteq Preclinical Services, Toronto, ON, Canada; 4McMaster Univ., Hamilton, ON, Canada  

5:00 PM–6:30 PM Concurrent Session 6  
PHYSICAL THERAPY AND REHABILITATION  

5:00 PM–5:30 PM 039 PARTIAL JOINT IMMOBILISATION PROTECTS AGAINST OA AND REVEALS DISTINCT BIOMECHANICAL THRESHOLDS IN THE JOINT  
A. Burleigh, K. Chong, J. Saklatvala, T.L. Vincent  
Kennedy Inst. of Rheumatology, London, United Kingdom  

5:30 PM–5:40 PM 040 EFFECTS OF EXERCISE PROGRAM ON PAIN, JOINT STIFFNESS AND PHYSICAL FUNCTION IN ELDERLY PATIENTS WITH KNEE OSTEOARTHRITIS. NURSING-BASED VERSUS HOME-BASED EXERCISE  
M.M. Espanha1, R. Lago2, M.J. Carvalho3, A.J. Rego4, J. Teles1  
1Fac. Human Kinetics-UTL, Lisboa, Portugal; 2ISAVE-Hlth.Sch. of Alto do Ave, Póvoa de Lanhoso, Portugal; 3Sports Faculty-UP, Porto, Portugal; 4Sports Faculty, Porto, Portugal  

5:40 PM–5:50 PM 041 RECENT KNEE JOINT BUCKLING IS NOT ASSOCIATED WITH CO-ACTIVATION OF THE HAMSTRINGS DURING ISOKINETIC QUADRICEPS ACTIVATION  
N.A. Segal1, L. Frey Law1, K. Wang2, J. Torner1, C.E. Lewis3, M. Nevitt4, D. Felson2, for the Multicenter Osteoarthritis (MOST) Study Group  
1Univ. of Iowa, Iowa City, IA; 2Boston Univ., Boston, MA; 3Univ. of Alabama at Birmingham, Birmingham, AL; 4Univ. of California San Francisco, San Francisco, CA  

6:00 PM–6:10 PM 042 EFFECTIVENESS OF VIDEO-BASED HOME EXERCISE FOR OSTEOARTHRITIS OF THE KNEE: A RANDOMIZED CONTROLLED TRIAL  
H. Tohyama1, T. Chiba1, K. Tadano1, K. Ikoma1, K. Yasuda1  
1Hokkaido Univ. Hosp., Sapporo, Japan; 2Hokkaido Univ. Sch. of Med., Sapporo, Japan  

6:10 PM–6:20 PM 043 EFFECTS OF EXERCISE ON PROGRESSION OF OA IN KNEE JOINTS  
J. Nam1, P. Perera1, J. Liu1, T. Butterfield2, S. Agarwal1  
1The Ohio State Univ., Columbus, OH; 2Univ. of Kentucky, Lexington, KY  
Young Investigator Award Winner  

6:20 PM–6:30 PM 044 A PREOPERATIVE ACTIVE REHABILITATION PROGRAM FOR PATIENTS WITH A FOCAL KNEE CARTILAGE LESION SIGNIFICANTLY IMPROVED KNEE FUNCTION AND POSTPONED THE NEED FOR CARTILAGE REPAIR SURGERY  
M.A. Risberg1, J.H. Røtterud1, L. Engebretsen2, K. Belsstad2, A. Åren2  

6:30 PM–7:30 PM MEET THE PROFESSOR MENTORSHIP SESSION FOR OARSI YOUNG INVESTIGATORS
6:30 PM–8:00 PM  Satellite Dinner Symposium  
THE ART AND THE SCIENCE OF PAIN MANAGEMENT IN OA: INTEGRATING NEW EVIDENCE INTO CLINICAL PRACTICE  
Sponsored by Pfizer

Saturday, September 25, 2010

7:30 AM–9:00 AM  Satellite Breakfast Symposium  
PERSONALIZED MEDICINE: NEW CHALLENGE IN OSTEOARTHRITIS  
Sponsored by Bioiberica

8:00 AM–9:00 AM  Breakfast Workshop C
I-11 STATISTICAL GENETIC ANALYSES OF LARGE JOINT OA  
Ana Valdes, PhD

8:00 AM–9:00 AM  Breakfast Workshop D
I-12 IMAGING IN HAND OA  
Dennis McGonagle

9:00 AM–10:30 AM  Plenary Session 4  
DEBATE ON GENOME-WIDE ASSOCIATION STUDIES: WHAT DO THEY PROVIDE AND WHERE ARE WE GOING?

9:00 AM–9:30 AM  I-13 Are GWAS Studies for Osteoarthritis Worth the Expense?  
Matthew Warman, MD

9:30 AM–10:00 AM  I-14 Has the GWAS been Successful?  
Tim Spector, MD, MSc, FRCP

10:00 AM–10:30 AM  Discussion

10:30 AM–11:00 AM  BREAK

11:00 AM–12:30 PM  Concurrent Session 7  
EPIDEMIOLOGY AND BIOMARKERS

11:00 AM–11:30 AM  I-15 Molecular Epidemiology and OA Biomarkers  
P. Eline Slagboom, PhD

11:30 AM–11:40 AM  I-16 SUBCHONDRAL BONE TRABECULAR INTEGRITY PREDICTS AND CHANGES CONCURRENTLY WITH OSTEOARTHRITIS PROGRESSION  
K. Virginia1, S. Feng1, S. Wang1, S. White1, M. Ainslie1, M.-P. Hellio Le Graverand-Gastineau2, A. Brett3, C. Charles3  
1Duke Univ., Durham, NC; 2Pfizer Global Res. and Dev., Groton, CT; 3Optasia Med., Inc., Manchester, United Kingdom

11:40 AM–11:50 AM  I-17 URINARY MARKERS, ALPHA CTX AND CTXII, ARE INDICATIVE OF OA SEVERITY AND BONE TURNOVER  
J.L. Huebner1, A.C. Bay Jensen2, D.J. Leeming3, R.E. Coleman1, G. McDaniel1, M.A. Karsdal2, V.B. Kraus1  

11:50 AM–12:00 PM  I-18 THE IDENTIFICATION OF CIRCULATING NATURAL ANTIBODIES AGAINST ENDOGENOUS MEDIATORS IN THE PERIPHERAL BLOOD SERA OF PATIENTS WITH OSTEOARTHRITIS OF THE KNEE: A NEW DIAGNOSTIC FRONTIER  
Y.A. Savitskaya, C. Duarte, R. Tellez, N. Marin, E. Morales, A. Izaquirre, C. Ibarra  
Natl. Inst. of Rehabilitation, Mexico City, Mexico
11:00 AM–12:30 PM  Concurrent Session 8

INFLAMMATION, CYTOKINES, AND SYNOVITUM

Rikard Holmdahl, MD, PhD

11:00 AM–11:30 AM  Antibodies Attacking Joint Cartilage

I. Garcia-Arnandis1, M. Guiller1, F. Gomar1, J.-P. Martel-Pelletier1, M. Alcaraz1
1Univ. of Valencia, Burjassot, Spain; 2Cardenal Herrera-CEU Univ., Moncada, Spain; 3Univ. of Montreal Hosp. Res. Ctr. (CRCHUM), Montreal, QC, Canada

11:30 AM–11:40 AM  051 CONTRIBUTION OF HIGH MOBILITY GROUP BOX 1 TO SYNOVITIS IN OSTEOARTHRITIS

P. Levinger1, M. Treenerry2, I. Levinger1, J. Feller1, N. Bergman5, M. McKenna6
1La Trobe Univ., Melbourne, Australia; 2Sch. of Exercise and Nutrition Sci., Deakin Univ., Melbourne, Australia; 3Sch. of Sport and Exercise Sci., Inst. of Sport, Exercise and Active Living, Melbourne, Australia; 4Warringal Med. Ctr., Melbourne, Australia; 5Warringal Med. Ctr., Melbourne, Australia; 6Inst. of Sport, Exercise and Active Living, Victoria Univ., Melbourne, Australia

11:40 AM–11:50 AM  052 AN INCREASE IN INFLAMMATORY MARKERS IN PEOPLE WITH KNEE OSTEOARTHRITIS IS RELATED TO PAIN AND ALTERED WALKING PATTERN

S. Clockaerts1, Y.M. Bastiaansen-Jenniskens2, G. Van Osch2, J.F. Van Offel1, J.A. Verhaar2, L. De Clerck1, J. Somville1
1Univ. of Antwerp, Edegem, Antwerp, Belgium; 2Erasmus MC, Univ. Med. Ctr., Rotterdam, Netherlands

11:50 AM–12:00 PM  053 SYNOVIAL INFLAMMATION IN PATIENTS UNDERGOING ARTHROSCOPIC MENSECTOMY: MOLECULAR CHARACTERIZATION AND RELATIONSHIP WITH SYMPTOMS

C.R. Scanzello1, B. McKean2, B. Swaim2, E. DiCarlo6, E. Umoh3, V. Kanda1, A. Nair1, D.M. Lee4, J.C. Richmond2, M.K. Crow2, S.R. Goldring2

12:00 PM–12:10 PM  054 THE INFRAFATELLAR FAT PAD SHOULD BE CONSIDERED AS AN ACTIVE OSTEOARTHRITIC JOINT TISSUE

A.B. Blom1, P.L. van Lent, M. van den Bosch, H.M. van Beuningen, H.M. van Beuningen, F.A. van de Loo, E.N. Blaney Davidson, P.M. van der Kraan, W.B. van den Berg
1Univ. of Antwerp, Edemeg, Antwerp, Belgium; 2Erasmus MC, Univ. Med. Ctr., Rotterdam, Netherlands

12:10 PM–12:20 PM  055 SYNOVIAL EXPRESSION OF CANONICAL WNT INDUCES CHONDROCYTE PHENOTYPE CHANGE AND OA-LIKE CARTILAGE DAMAGE

K. Sigurjonsdottir1, T.M. Bjorgulfsson1, T. Aspelund1, G. Eiriksdottir2, S. Sigurdsson2, T. Ingvarsson3, T.B. Harris4, L. Lauer4, V. Gudnason2,1, H. Jonsson5
1Univ. of Iceland, Reykjavik, Iceland; 2Icelandic Heart Association, Kopavogur, Iceland; 3Central Hosp., Akureyri, Iceland; 4Natl. Inst. on Aging, Bethesda, MD; 5Landspitalinn, Univ. of Iceland, Reykjavik, Iceland

12:20 PM–12:30 PM  056 TYPE 3 FINGER LENGTH PATTERN IS ASSOCIATED WITH TOTAL KNEE (TKR) BUT NOT WITH HIP REPLACEMENTS (THR) IN THE ELDERLY: THE AGES-REYKJAVIK STUDY

B. Hirata1,2, F. Kugimiya1, T. Saito1, F. Yano2, T. Ikeda1, K. Nakamura1, U.-i. Chung2, H. Kawaguchi1
1The Univ. of Tokyo, Sensory & Motor System Med., Tokyo, Japan; 2The Univ. of Tokyo, Ctr. for Disease Biology and Integrative Med., Tokyo, Japan
Young Investigator Award Winner
3:10 PM–3:20 PM  061  ALTERED SCLEROSTIN SYNTHESIS IN CARTILAGE AND BONE CONTRIBUTE OA PATHOLOGY  
B. Chan1, E. Fuller1, L. Rowley2, D. Belluccio3, S. Smith1, M. Cake3, R. Read3, J. Bateman2, P. Sambrook1,  
C.B. Little1  
1Kolling Inst. of Med. Res., Univ. of Sydney, St Leonards, Australia; 2Murdoch Childrens Res. Inst., Parkville,  
Australia; 3Murdoch Univ., Perth, Australia  

3:20 PM–3:30 PM  062  INDUCTION OF INFLAMMATORY MEDIATORS AND MATRIX DEGRADATION IN ARTICULAR CARTILAGE BY  
TENASCIN-C AND TLR4 SIGNALING  
I. Patel, W. Sun, K.E. Georgiadis, E.A. Morris, C.R. Flannery, P.S. Chockalingam  
Pfizer, Cambridge, MA  

2:00 PM–3:30 PM  Concurrent Session 10  
GENETICS, GENOMICS AND EPIGENETICS  

2:00 PM–2:30 PM  I-17 Metabolic Diseases and OA  
Pascal Richette, MD, PhD  

2:30 PM–2:40 PM  063  ALLELIC EXPRESSION ANALYSIS OF THE GENES WITHIN THE CHROMOSOME 7q22 OA SUSCEPTIBILITY  
LOCUS REVEALS EVIDENCE FOR FUNCTIONAL POLYMORPHISM IN COGS  
A.W. Dodd, N. Wreglesworth, E.V. Raine, A. Gravani, J. Loughlin  
Newcastle Univ., Newcastle upon Tyne, United Kingdom  

2:40 PM–2:50 PM  064  REDUCED EXPRESSION OF COLLAGEN TYPE IX IN HUMAN OSTEOARTHRITIC CHONDROCYTES IS  
ASSOCIATED WITH EPIGENETIC SILENCING BY DNA HYPERMETHYLATION  
K. Imagawa1,2, M.C. de Andrés1, K. Hashimoto3, E. Ito4, R.O. Oreffo1, H.I. Roach1  
1Univ. of Southampton, Southampton, United Kingdom; 2Tohoku Univ., Sendai, Japan; 3Hosp. for Special Surgery,  
New York, NY  

2:50 PM–3:00 PM  065  THE OSTEOARTHRITIS-ASSOCIATED GENE GDF5 IS UNDER EPIGENETIC REGULATION IN PATIENT TISSUES  
AND IN A RANGE OF HUMAN CELL LINES  
L.N. Reynard, A. Gravani, J. Loughlin  
Newcastle Univ., Newcastle upon Tyne, United Kingdom  

3:00 PM–3:10 PM  066  IDENTIFICATION AND CHARACTERISATION OF MICRORNAS INVOLVED IN CHONDROCYTE  
DIFFERENTIATION AND OSTEOARTHROTIS  
T.E. Swingler1, K.L. Culley1, F. Nicolas1, S.M. Soond1, M. Abu-Elmagd1, R.P. Boot-Handford2, D.A. Young3,  
A. Chantry1, A. Munsterberg1, M. Hajihosseini1, T. Dalmay1, L.M. Clark1  
1Univ. of East Anglia, Norwich, United Kingdom; 2Univ. of Manchester, Manchester, United Kingdom; 3Newcastle  
Univ., Newcastle, United Kingdom  

3:10 PM–3:20 PM  067  CARTILAGE-SPECIFIC MICRORNA-140 REGULATES TISSUE HOMEOSTASIS AND PROTECTS AGAINST  
OSTEOARTHRITIS-LIKE PATHOLOGY  
S. Miyaki1, T. Sato2, A. Inoue1, S. Otsuki1, Y. Ito2, S. Yokoyama2, Y. Kato3, S. Yamashita2, T. Nakasa2,  
M.K. Lotz2, H. Kudo-Ueno2, H. Asahara3  
1The Scripps Res. Inst. La Jolla, CA; 2Natl. Ctr. for Child Hlth.and Dev., Tokyo, Japan; 3Natl. Inst. of Advanced Sci.  
and Technology, Tsukuba, Japan  

3:20 PM–3:30 PM  068  THE MICRORNAS AS BIOMARKERS SPECIFIC OF KNEE OSTEOARTHRITIS  
Y.-M. Pers1,2, S. Fabre1, F. Djouad2, I. Duroux-Richard2, F. Apparailly2, D. Noel2, C. Jorgensen1,2  
1Unité Thérapeutique Clinique des Maladies Ostéoarticulaires, Montpellier, France; 2INSERM U844, Montpellier,  
France  

3:30 PM–5:00 PM  POSTER SESSION 2  

5:00 PM–6:00 PM  Concurrent Session 11  
ADVANCES IN OA THERAPY  

5:00 PM–5:30 PM  I-18  Nanomedecine and Osteoarthritis: What Can We Expect for the Future?  
Kazuo Yudoh, MD, PhD  

5:30 PM–5:40 PM  069  STATIN USE IS ASSOCIATED WITH REDUCED INCIDENCE AND PROGRESSION OF KNEE OSTEOARTHRITIS  
S. Clockaerts1,2, B. Stricker1, Y.M. Bastiaansen-Jenniskens1, J.B. Van Glabbeek1, J.B. Van Meurs2, J.A. Verhaar2,  
A. Hofman2, G.V. Van Osch2, S.M. Bierma-Zeinstra2  
1Univ. of Antwerp, Edegem, Antwerp, Belgium; 2Erasmus MC, Univ. Med. Ctr., Rotterdam, Netherlands  

5:40 PM–5:50 PM  070  EIGHTY-SEVEN PERCENT OF 66 ADULT PATIENTS WITH ADVANCED OSTEOARTHRITIS OF THE KNEE  
SUBJECTED TO TREATMENT WITH INTRA-ARTICULAR INJECTIONS OF HUMAN GROWTH HORMONE AVOID  
TOTAL KNEE ARTHROPLASTY  
A.R. Dunn  
Mt. Sinai Med. Ctr., Miami Beach, FL  

5:50 PM–6:00 PM  071  EFFECT OF ROSEMARY EXTRACT AND RELATED FLAVONOIDS ON CHONDRO-PROTECTION AND  
ON THE BONE-CARTILAGE CROSSTALK  
M.-N. Horcajada1, C. Sanchez2, F. Scalfe1, L. Ameve1, Y. Henrotin2, E. Offord1  
1Nestle, Lausanne, Switzerland; 2Univ. of Liège, Liège, Belgium
5:00 PM–6:00 PM  Concurrent Session 12

STEM CELLS, TISSUE ENGINEERING AND REPAIR

5:00 PM–5:30 PM  I-19 Regenerative Medicine: The Biological Repair of Joint Surfaces  p. S7
Frank Lyuyten, MD, PhD

5:30 PM–5:40 PM  072 MESENCHYMAL STEM CELLS IN OA PATIENTS: DOWNREGULATION OF WNT SIGNALING PATHWAY AND MIR335  p. S39
B. Fernandez-Gutierrez1, E. Villafuertes1, J. Hoyas1, M. Gonzalez2, P. Tornero-Esteban1
1Hosp. Clinico San Carlos, Madrid, Spain; 2CNIC, Madrid, Spain

5:40 PM–5:50 PM  073 MIR-7 AND MIR-130B ARE DIFFERENTIALLY REGULATED DURING MESENCHYMAL STEM CELL COMMITMENT  p. S39
G. Palmer1, L. Danielsson2, M. Attur1, S.B. Abramson1, E. Hernando2
1NYU Hosp. for Joint Diseases, New York, NY; 2NYU Langone Med. Ctr., New York, NY

5:50 PM–6:00 PM  074 BOVINE PRIMARY CHONDROCYTES STIMULATE CARTILAGINOUS MATRIX PRODUCTION BY HUMAN EMBRYONIC STEM CELLS  p. S39
N. Ahmed1,2, D.W. Taylor1,2, G. Keller3, M.D. Grynpas1,2, R. Kandel1,2
1Mount Sinai Hosp., Toronto, ON, Canada; 2NYU Langone Med. Ctr., New York, NY; 3McEwen Ctr. for Regenerative Med., Univ. Hlth.Network, Univ. of Toronto, Toronto, ON, Canada

6:00 PM–7:30 PM  Satellite Dinner Symposium

EXPLORING EMERGING CONCEPTS IN OSTEOARTHRITIS: PATHOGENESIS, BIOMARKERS AND FUTURE THERAPIES
Sponsored by Novartis

7:30 PM–10:30 PM  CONGRESS DINNER

Sunday, September 26, 2010

8:00 AM–9:00 AM  Breakfast Workshop E

I-20 IMPACT OF OSTEOARTHRITIS PAIN ON THE BRAIN  p. S7
A. Vania Apkarian, PhD
Thomas Schnitzer, MD, PhD

8:00 AM–9:00 AM  Breakfast Workshop F

I-21 IMAGING FOR MEASUREMENT OF DYNAMIC JOINT FUNCTION  p. S8
Scott Tashman, PhD

9:10 AM–10:30 AM  Concurrent Session 13

SURGICAL TREATMENT

9:10 AM–9:40 AM  Optimizing Outcomes in Total Joint Replacement Surgery
Göran Garellick, MD, PhD

9:40 AM–9:50 AM  075 OSTEOARTHRITIS PATIENTS’ PERCEPTIONS REGARDING APPROPRIATENESS FOR TOTAL JOINT REPLACEMENT SURGERY  p. S40
G. Hawker1, L. Frankel1, L. Freeman-Collins2, D. Marshall3, B. Conner-Spady3, C. SanMartin4
1Univ. of Toronto, Toronto, ON, Canada; 2Women’s Coll. Hosp., Toronto, ON, Canada; 3Univ. of Calgary, Calgary, AB, Canada; 4Statistics Canada, Ottawa, ON, Canada

9:50 AM–10:00 AM  076 FOURTEEN YEAR RISK OF REVISION FOLLOWING PRIMARY TOTAL HIP REPLACEMENT PERFORMED IN A US POPULATION BASED SAMPLE  p. S40
J.N. Katz1,2, E.A. Wright1,2, A.A. Nti1, J. Wright1,2, E. Losina1,2
1Brigham and Women’s Hosp., Boston, MA; 2Harvard Med. Sch., Boston, MA

10:00 AM–10:10 AM  077 THE USE AND OUTCOME OF HIGH TIBIAL OSTEOTOMY FOR KNEE OSTEOARTHRITIS IN SWEDEN 1998-2007  p. S41
A. W-Dahl1, O. Robertsson, S. Lohmander
Clinical Sci., Lund, Lund, Sweden

10:10 AM–10:20 AM  078 JOINT DISTRACTION IN TREATMENT OF CANINE EXPERIMENTALLY INDUCED OSTEOARTHRITIS LEADS TO CARTILAGE REPAIR ACCOMPANIED BY SUSTAINED RELIEVE OF PAIN  p. S41
S.C. Mastbergen1, F. Intema1, P.M. van Roermund2, H.A. Hazewinkel1, F.P. Lafeber1
1Rheumatology & Clinical Immunology, Univ. Med. Ctr. Utrecht, Utrecht, Netherlands; 2Orthopaedics, Univ. Med. Ctr. Utrecht, Utrecht, Netherlands

A.M. Davis1, E.M. Badley1, S. Hogg-Johnson2, S. Ibrahim3, A.V. Perruccio1, R. Wong1, D.E. Beaton4, P. Côté1, M.A. Gignac1, D. Streiner5
1Toronto Western Res. Inst., Toronto, ON, Canada; 2Inst. for Work and Hlth., Toronto, ON, Canada; 3Harvard and Brigham and Women’s Hosp., Boston, MA; 4St. Michael’s Hosp., Toronto, ON, Canada; 5Kunin-Lunenfeld Res. Inst., Baycrest Hosp., Toronto, ON, Canada
9:10 AM–10:30 AM  **Concurrent Session 14**

**SPINE AND INTERVERTEBRAL DISC**

9:10 AM–9:40 AM  **I-22 Links between Intervertebral Disc Degeneration and Osteoarthritis**

Jill Urban, PhD

9:40 AM–9:50 AM  **080 LUMBAR DISC DEGENERATION AND GENETIC FACTORS ARE THE MAIN RISK FACTORS FOR LOW BACK PAIN: THE UK TWIN SPINE STUDY**

G. Livshits1,2, S. Ermakov2, M. Popham1, A.J. MacGregor1,3, P.N. Sambrook4, T.D. Spector1, F.M. Williams1

1King's Coll. London, London, United Kingdom; 2Sackler Faculty of Med., Tel Aviv University, Israel; 3Sch. of Med., University of East Anglia, United Kingdom; 4Inst. of Bone and Joint Res., University of Sydney, Australia

9:50 AM–10:00 AM  **081 DISC DEGENERATION OF THE UPPER LUMBAR DISCS IS ASSOCIATED WITH HIP PAIN**

E. de Schepper, J. Damen, A. Hofman, B. Koes, S. Bierma-Zeinstra

Erasmus MC, Rotterdam, Netherlands

10:00 AM–10:10 AM  **082 SPINE OSTEOARTHRITIS DOES NOT PROTECT AGAINST INCIDENT VERTEBRAL FRACTURES DESPITE HIGHER LUMBAR SPINE BMD**


Erasmus MC, Rotterdam, Netherlands

10:10 AM–10:20 AM  **083 LASER-INDUCED DISC DEGENERATION: A NEW ANIMAL MODEL TO EVALUATE TISSUE ENGINEERING STRATEGIES**

O. Lucas1,2, J. Clouet1, O. Hamel1,3, M. Fuselli4, B. Fellah4, O. Gauthier4, J. Lesoeur1, Y. Cherel1, G. Grimandi1, E. Bord4, P. Weiss1, C. Vinatier1, J. Guicheux1


10:20 AM–10:30 AM  **084 MCMASTER-TORONTO ARTHRITIS PATIENT PREFERENCE DISABILITY QUESTIONNAIRE (MACTAR) SENSITIVITY TO CHANGE IN DISABLING CHRONIC LOW BACK PAIN: INFLUENCE OF SHIFTS IN PATIENTS PRIORITIES OVER TIME**

K. Sanchez, A. Papelard, C. Nguyen, F. Rannou, M. Revel, S. Poiradeau

AP-HP, Université ParisDescartes, Paris, France

10:30 AM–11:00 AM  **BREAK**

11:00 AM–12:30 PM  **Plenary Session 5**

**OA YEAR IN REVIEW**

Etiopathogenesis

Wim van den Berg, PhD

Genetics

John Loughlin, PhD

Biochemical Markers

Virginia Byers Kraus, MD, PhD

Imaging

David Hunter, MBBS, PhD, FRACP

Pharmacology

Francis Berenbaum, MD, PhD

Non-Pharmacology

Gillian Hawker, MD, PhD