



**2024  
Scientific  
Program**

**BREAKING BARRIERS**  
THROUGH MULTI-DISCIPLINARY RESEARCH

# OARSI 2024

WORLD CONGRESS ON OSTEOARTHRITIS

**VIENNA, AUSTRIA**, **APRIL 18-21, 2024**  
MESSE WIEN EXHIBITION & CONGRESS CENTER



## Thursday, April 18

**8:00 AM - 10:30 AM** **Pre-Congress Workshop:  
Delivering Best Evidenced Osteoarthritis Care Workshop for Clinicians**

**Room: Schubert 4,5,6, 1<sup>st</sup> Floor**



*Chairperson: David Hunter*

**Understand the Epidemiology and Prognosis of Osteoarthritis**

*Lisa Sperl*

**Talking to People About Their OA**

*Sam Bunzli*

**Supporting Self-Management for People with OA**

*Shannon Mihalko*

**Physical Activity and Exercise**

*Kim Bennell*

**Weight Management**

*Marius Henriksen*

**Pharmacotherapy**

*Shirley Yu*

**How to Have a Behavior Change Conversation**

*Jillian Eyles, Martin van der Esch, & Sarah Kobayashi*

**8:00 AM – 10:30 AM** **Pre-Congress Workshop: Cartilage Repair:  
Lesson from Regenerative Species**

**Room: Lehar 1,2,3,4, Ground Floor**

*Chairpersons: Erika Kague & Farida Djouad*

**Preclinical Models in Drug Development: From Rodents to Larger  
Translational Model**

*Ali Mobasheri & Jaqueline Lourdes Rios*

**Dynamic Cell Plasticity During Synovial Joint Regeneration in Adult  
Zebrafish**

*Joanna Smeeton*

**Exploring the Mechanisms of Cartilage Regeneration Using Zebrafish**

*Farida Djouad*

**Probing Mechanisms of Osteoarthritis Using Zebrafish**

*Erika Kague*

**Osteomodulin Down-regulation is Associated with Osteoarthritis  
Development**

*Jérémie Zappia*

**Using the Genetic Tractability of Zebrafish to Study Bone Diseases**

*Joanna Moss*

**Ubiquitin Clues to Mechanoflammation in Tissue Damage and Repair:  
Lessons from Zebrafish Model System**

*Heba Ismail*

**8:00 AM- 10:30 AM** **Pre-Congress Workshop:  
Amplifying the Patient's Voice: How We Can Make Research More Impactful**  
*Organized by the Early Career Investigators*

**Room: Schubert 1,2,3, 1<sup>st</sup> Floor**

*Chairpersons: Jesse Charlton & Armaghan Mahmoudian*

**Patient Partners on How Osteoarthritis Has Affected their Lives and What They Value Most in their Rehabilitation/Management Program**  
*Corné Baatenburg de Jong & Belinda Lawford*

**Frameworks for Rigorously and Effectively Including Patient Partners and Experts in the Research Pathway**  
*James Bilzon & Leigh Callahan*

**Identify the Challenges and Benefits of Engaging Patients in Research Through Scientific Research Examples**  
*Lauren King & Jackie Whittaker*

**10:30 AM – 11:00 AM GENERAL BREAK**

**11:00 AM – 12:30 PM OAC & OACO Journal Session**  
*Organized by the OAC & OACO Journal*

**Room: Lehar 1,2,3,4, Ground Floor**

**Welcome:**

- Editors in Chief, OAC and OAC Open

**Scientific Session:**

- Paper of the Year Award presentations
- Biostatistical Methods Update

**Award Ceremony:**

- Recognition of Reviewers of the Year, Mentors & Mentees & Guest Editors

**12:30 PM – 2:00 PM LUNCH ON OWN**

**2:00 PM - 3:30 PM Plenary Session 1: When OA Meets Digital Health & Nutrition**

**Room: Strauss 1,2,3, Ground Floor**

*Moderators: Mona Dvir-Ginzberg, Jérémie Sellam, & Tanja Stamm*

2:00 PM – 2:30 PM **The Present and Future of DiGAs in Healthcare and Arthritis**  
*Johannes Knitza*

2:30 PM – 3:00 PM **Innovative Drugs for Obesity Treatment: A Game Changer?**  
*Sébastien Czernichow*

3:00 PM – 3:10 PM **1 VARIATIONS IN TRAJECTORY OF ADHERENCE TO A DIGITAL SELF-MANAGEMENT TREATMENT FOR KNEE AND HIP OSTEOARTHRITIS: PREDICTORS**

AND CONSEQUENCES

Ali Kiadaliri

3:10 PM – 3:20 PM 2 TRANSCUTANEOUS AURICULAR VAGUS NERVE STIMULATION IN EROSIIVE HAND OSTEOARTHRITIS: RESULTS OF THE ESTIVAL MULTICENTER RANDOMIZED SHAM-CONTROLLED TRIAL  
Alice Courties

3:20 PM – 3:30 PM 3 BAD KNEES & BROKEN HEARTS: miRs RELEASED FROM OSTEOARTHRITIC (OA) JOINTS INCREASE CARDIOVASCULAR DISEASE (CVD) RISK  
Christopher B. Little

3:30 PM – 3:45 PM **BREAK**

**3:45 PM - 5:15 PM Plenary Session 2: Highest Rated Abstracts by Early Career Investigators**

**Room: Strauss 1,2,3, Ground Floor**

*Moderators: Martin Englund & Gun-il Im*

3:45 PM – 3:55 PM 4 A DIGITAL MINDSET INTERVENTION TO IMPROVE PAIN AND EXERCISE PARTICIPATION IN INDIVIDUALS WITH KNEE OSTEOARTHRITIS: A RANDOMIZED CLINICAL TRIAL  
Melissa Boswell

3:55 PM – 4:05 PM 5 PATIENT-LEVEL ACTIVE SURVEILLANCE OF KNEE OSTEOARTHRITIS WITH REINFORCEMENT LEARNING  
Khanh Nguyen

4:05 PM – 4:15 PM 6 REMODELLING OF VASCULATURE AND NERVES IN MURINE JOINTS FOLLOWING SURGICAL JOINT DESTABILISATION  
Vicky Batchelor

4:15 PM – 4:25 PM 7 ASSOCIATION OF ACCELEROMETER-MEASURED PHYSICAL ACTIVITY PATTERNS WITH CARDIOVASCULAR DISEASES AND MORTALITY IN PEOPLE WITH OSTEOARTHRITIS: A PROSPECTIVE COHORT STUDY  
Tianxiang Fan

4:25 PM – 4:35 PM 8 TEMPORAL TRENDS IN CROSS-COUNTRY INEQUALITIES OF THE BURDEN OF OSTEOARTHRITIS FROM 1990 TO 2019: DATA FROM THE GLOBAL BURDEN OF DISEASE STUDY 2019  
Haowei Chen

4:35 PM – 4:45 PM 9 THE MODULATING EFFECT OF BIOMECHANICAL FORCES ON THE PROINFLAMMATORY TISSUE ENVIRONMENT IN OSTEOARTHRITIS USING ADVANCED THREE-DIMENSIONAL TISSUE-MIMETIC LAB-ON-A-CHIP MODELS  
Mario Rothbauer

4:45 PM – 4:55 PM 10 ASSOCIATION OF WEARABLE-SENSOR DERIVED GAIT MEASURES WITH CARTILAGE WORSENING OVER 2 YEARS IN THE MULTICENTER OSTEOARTHRITIS STUDY  
Kathryn Louise Bacon

4:55 PM – 5:05 PM 11 SINGLE-PAYER HEALTH INSURANCE MAY NOT MITIGATE INCOME-BASED DIFFERENCES IN TOTAL HIP ARTHROPLASTY UTILIZATION: A TRANSNATIONAL ANALYSIS  
Bella Mehta

5:05 PM – 5:15 PM 12 EPIGENOMIC LANDSCAPE ACROSS HUMAN ARTICULAR CARTILAGE DEVELOPMENT  
Sarah J. Rice

**5:15 PM – 5:30 PM BREAK**

**5:30 PM – 6:30 PM    Opening Ceremony & Awards Recognition**

**Room: Straus 1,2,3, Ground Floor**

**Recognition of Lifetime Achievement Award Winner**



Krycia Dziedzic, PhD

**Recognition of Basic Science Research Award Winner**

Tonia Vincent, MD, PhD

**Recognition of Clinical Research Award Winner**

Margreet Kloppenburg, MD, PhD

**Recognition of Rising Star Awards**

**Basic Science Research**

Kelsey Collins, PhD

**Clinical Research**

Adam Culvenor, PhD

**6:30 PM – 7:30 PM    Keynote Address: From Technology to Psychology**

**Room: Straus 1,2,3, Ground Floor**

*Moderators: Mohit Kapoor & Thomas Hügle*

**6:30 PM – 7:00 PM    iPSC-Derived Injectable Spheroids and Cartilage Regeneration**

*Ji Hyeon Ju*

**7:00 PM – 7:30 PM    (Bio) Psychological Network Models of Chronic Joint Pain**

*Rinie Geenen*

**7:30 PM – 9:00 PM    Opening Reception with Exhibitors**

**Room: Hall B, Ground Floor**

## Friday, April 19

**7:30 AM – 8:30 AM Breakfast Poster Tours\***

**Room: Hall B, Ground Floor**

**Poster Tour 1:** Latest Insights from Clinic and Imaging  
*Guided by Margreet Kloppenburg*

**Poster Tour 2:** New Developments in OA Basic Science  
*Guided by Tom Appleton*

**Poster Tour 3:** Novel Tools for Advancing Innovation in OA  
*Guided by Barbara Chan*

**Poster Tour 4:** Advances in OA Therapy: Pharmacological and Non-Pharmacological  
*Guided by Francis Berenbaum*

*\*There is an additional registration fee to attend. Space is limited, please see the registration desk for more information and availability.*

**7:30 AM – 8:30 AM Breakfast Workshop A:  
Managing Bone and Joint Diseases in Older Aged: Epidemiology and  
Lessons for the Clinic (OARSI-ESCEO Joint Symposium)**

**Room: Schubert 4,5,6, 1<sup>st</sup> Floor**

*Chairpersons: Gun-il Im & Jean Yves-Reginster*

**Immunometabolic Alterations Linking Diabetes Osteoarthritis and  
Osteoporosis**  
*Ali Mobasher*

**Impact of Osteoporosis and Osteoarthritis as Comorbidities in the Aging  
Population**  
*Elaine Dennison*

*\*There is an additional registration fee and ticket to attend. Space is limited, please see the registration desk for more information and availability.*

**7:30 AM – 8:30 AM Breakfast Workshop B:  
Computer Vision for Motion Tracking in Osteoarthritis**

**Room: Schubert 1,2,3, 1<sup>st</sup> Floor**

*Chairperson: Thomas Hügle*

**Single Camera Motion Capture in Osteoarthritis**  
*Melissa Boswell*

*\*There is an additional registration fee and ticket to attend. Space is limited, please see the registration desk for more information and availability.*

**8:45 AM – 10:15 AM Concurrent Session 1: Risk Factors, Prevention, and Early Disease**

**Room: Strauss 1,2,3, Ground Floor**

*Moderators: Matthew Harkey & Matlock Jeffries*

- 8:45 AM – 9:25 AM **Defining Early-Stage Symptomatic Knee Osteoarthritis – an OARSI Initiative (EsSKOA ECIs)**  
*Lauren King*  
*Jean Liew*  
*Armaghan Mahmoudian*
- 9:25 AM - 9:35 AM 13 EARLY-STAGE VS ESTABLISHED KNEE OSTEOARTHRITIS: A COMPARATIVE STUDY ON THE PREVALENCE, CHARACTERISTICS, AND OUTCOMES OF SUPERVISED EXERCISE AND EDUCATION AMONG 10,365 PATIENTS  
Stan Drummen
- 9:35 AM - 9:45 AM 14 YOUNG ADULTS WITH ACL INJURIES AT INCREASED OSTEOARTHRITIS RISK AND ADOLESCENTS WITH NONTRAUMATIC KNEE PAIN: COMPARISON OF LONG-TERM PATIENT-REPORTED OUTCOMES  
Ewa M. Roos
- 9:45 AM - 9:55 AM 15 ASSESSING THE EFFICACY OF THE STOP OSTEOARTHRITIS (SOAR) PROGRAM: A RANDOMIZED DELAYED-CONTROLLED TRIAL FOR PERSONS AT INCREASED RISK OF EARLY ONSET POST-TRAUMATIC KNEE OSTEOARTHRITIS  
Justin Losciale
- 9:55 AM – 10:05 AM 16 IS ANTERIOR CRUCIATE LIGAMENT CONTINUITY ON MRI 5 YEARS AFTER ACUTE ACL RUPTURE ASSOCIATED WITH 11-YEAR OUTCOMES? A SECONDARY ANALYSIS FROM THE KANON TRIAL  
Stephanie Filbay
- 10:05 AM - 10:15 AM 17 CHONDROCALCINOSIS IS A RISK FACTOR FOR KNEE OSTEOARTHRITIS AND PAIN INCIDENCE.  
Yahong Wu

**8:45 AM – 10:15 AM Concurrent Session 2: Imaging**

**Room: Lehar 1,2,3,4, Ground Floor**



*Moderators: Frank Roemer and Thomas Link*

- 8:45 AM – 9:25 AM **Interventional Radiology and Treatment of Osteoarthritis**  
*Yan Epelboym*
- 9:25 AM - 9:35 AM 18 THE ASSOCIATION OF SEVERITY AND PROGRESSION OF STRUCTURAL HAND OA WITH PROGRESSION OF STRUCTURAL KNEE OA: THE IMI-APPROACH COHORT  
Sietse Terpstra
- 9:35 AM - 9:45 AM 19 GENICULAR ARTERY EMBOLIZATION VERSUS SHAM EMBOLIZATION FOR SYMPTOMATIC KNEE OSTEOARTHRITIS: 1-YEAR RESULTS FROM A RANDOMIZED CONTROLLED TRIAL.  
Tijmen Alexander van Zadelhoff
- 9:45 AM - 9:55 AM 20 IS DETECTION OF DMOAD TREATMENT MORE EFFECTIVE WHEN PERFORMING QUANTITATIVE CARTILAGE ANALYSIS WITH UNBLINDED IMAGE ACQUISITION ORDER?  
Felix Eckstein
- 9:55 AM – 10:05 AM 21 PREDICTION OF INCIDENT CONSTANT AND INTERMITTENT KNEE PAIN BY CARTILAGE THICKNESS AND T2 VALUES: DATA FROM THE OAI  
Maximilian T. Löffler

OARSI 2024 World Congress on Osteoarthritis Program

10:05 AM - 10:15 AM 22 PATELLA SHAPE ANALYSIS PREDICTS KNEE ARTHROPLASTY RISK ENHANCED BY DIFFUSION MODEL  
Sing Hin Lau

**10:15 AM – 10:45 AM NETWORKING BREAK with EXHIBITORS**

**Room: Hall B, Ground Floor**

**10:20 AM – 10:35 AM Theater Session**

**Room: Stolz 1, Ground Floor**



iPPS: Shifting the OA Treatment Paradigm

**10:45 AM – 12:15 PM Plenary Session 4: Innovation in OA Research**

**Room: Strauss 1,2,3, Ground Floor**



*Moderators: Catherine Le Visage & Jeroen Geurts*

10:45 AM – 11:25 AM **Update on Joint-on-a-chip in OA**  
Séverine Le Gac

11:25 AM – 11:35 AM 23 MAPPING THE JOINT-NERVE INTERACTOME OF THE KNEE: AN INTEGRATIVE APPROACH FOR IDENTIFYING NEW STRATEGIES FOR THE CONTROL OF JOINT PAIN  
Anne-Marie Malfait

11:35 AM – 11:45 AM 24 INSIGHTS INTO THE GENOMIC AETIOLOGY OF OSTEOARTHRITIS: GENOME-WIDE ASSOCIATION STUDY META-ANALYSIS ACROSS 1,962,069 INDIVIDUALS (On behalf of the Genetics of Osteoarthritis Consortium)  
Konstantinos Hatzikotoulas

11:45 AM – 11:55 AM 25 FIBROBLAST GROWTH FACTOR 18 GENE THERAPY TREATMENT IS PROTECTIVE TO CARTILAGE AND SUBCHONDRAL BONE IN RAT MODEL OF OSTEOARTHRITIS  
Alexei Goraltchouk

11:55 AM – 12:05 PM 26 MITOCHONDRIAL TRANSPLANTATION AS A NEW PERSPECTIVE FOR OSTEOARTHRITIS TREATMENT  
Mercedes Fernandez-Moreno

12:05 PM – 12:15 PM 27 NETWORK MEDICINE-BASED APPROACH TO INTERROGATE CHONDROPROTECTIVE EFFECTS OF REHABILITATIVE EXERCISE VIA CIRCULATING EXTRACELLULAR VESICLES  
Hirota Iijima

**12:30 PM – 2:00 PM Satellite Lunch Symposium**

**Room: Lehar 1,2,3,4, Ground Floor**



**Osteoarthritis Therapies: Learning from Failures and Successes**



**2:00 PM - 3:30 PM Concurrent Session 3: Rehabilitation Medicine and Biomechanics**

**Room: Strauss 1,2,3, Ground Floor**

*Moderators: Jesse Charlton & Michelle Hall*

- 2:00 PM – 2:40 PM **Healing ACL Ruptures without Surgery and Implications for Osteoarthritis**  
*Stephanie Filbay*
- 2:40 PM – 2:50 PM 28 PHYSIOTHERAPIST-LED TREATMENT FOR FEMOROACETABULAR IMPINGEMENT SYNDROME (THE PHYSIOFIRST STUDY): A PARTICIPANT AND ASSESSOR-BLINDED RANDOMISED CONTROLLED TRIAL.  
Joanne L. Kemp
- 2:50 PM – 3:00 PM 29 VIDEOCONFERENCING WITH A PHYSIOTHERAPIST VERSUS IN-PERSON CARE FOR KNEE OSTEOARTHRITIS: THE PEAK NON-INFERIORITY RANDOMISED CONTROLLED TRIAL.  
Rana S. Hinman
- 3:00 PM – 3:10 PM 30 IMPLEMENTING OA TREATMENT RECOMMENDATIONS IN PRIMARY CARE POSTPONED JOINT REPLACEMENT IN HIP AND KNEE JOINTS - 8 YEAR FOLLOW-UP OF A CLUSTER RANDOMIZED CONTROLLED TRIAL.  
Nina Østerås
- 3:10 PM – 3:20 PM 31 RELATION OF PAIN SENSITIZATION WITH KNEE LOADING DURING WALKING IN PEOPLE WITH KNEE OSTEOARTHRITIS  
Ehyun Kim
- 3:20 PM – 3:30 PM 32 REDUCED COMPRESSIVE & SHEAR FORCES FROM GAIT RETRAINING RELATE TO SLOWED CARTILAGE DEGENERATION  
Kirsten Seagers

**2:00 PM - 3:30 PM Concurrent Session 4: Joint Related Tissue**

**Room: Lehar 1,2,3,4, Ground Floor**

*Moderators: Jessica Bertrand & Johanna Bolander*

- 2:00 PM – 2:40 PM **Joint Cartilage in Long-Duration Spaceflight**  
*Henning Madry*
- 2:40 PM – 2:50 PM 33 THE PHENOTYPE AND FATE OF SYNOVIAL MACROPHAGES IS MODULATED BY INJURY AND OBESITY IN OSTEOARTHRITIS  
Natalia S. Harasymowicz
- 2:50 PM – 3:00 PM 34 MACROPHAGE DIVERSITY IN THE STIFFENING AND FIBROTIC SYNOVIAL NICHE FOLLOWING JOINT INJURY  
Sung Yeon Kim
- 3:00 PM – 3:10 PM 35 MECHANICALLY ACTIVE JOINT-ON-CHIP MODELS AS ADVANCED PRECLINICAL TOOLS TO TEST ANTI-OA THERAPIES AND DISSECT THE CROSS-TALK AMONG DIFFERENT COMPARTMENTS IN OA  
Paola Occhetta
- 3:10 PM – 3:20 PM 36 HEPARAN SULFATE-DEFICIENCY RESULTS IN ALTERED MATRIX PROPERTIES AND IMPAIRED CELL MATRIX INTERACTIONS  
Ann-Christine Severmann
- 3:20 PM – 3:30 PM 37 SPATIAL TRANSCRIPTOMICS OF JOINT SPACE-INTERFACING TISSUES USING A PRE-CLINICAL MOUSE MODEL OF OSTEOARTHRITIS  
Jason S. Rockel

**2:00 PM – 3:30 PM Clinical Trials Symposium**

**Room: Schubert 4,5,6, 1<sup>st</sup> Floor**



*Moderators: Morten Karsdal & Ali Mobasheri*



**Current Evidence for Anti-inflammatory Treatments of OA as DMOADs**

*Richard Loeser*



GENASCENCE

**"Imaging Modalities for Identification of the Molecular Inflammatory Endotype of Progressive OA"**

*Olga Kubassova*



Biomarkers & Development

**Soluble Biomarkers of Inflammation and Tissue Destruction:  
The Inflammatory Endotype**

*Anne C. Bay-Jensen*



**3:30 PM – 5:00 PM POSTER SESSION 1 & NETWORKING WITH EXHIBITORS**

**Room: Hall B, Ground Floor**



3:30 PM – 4:15 PM

Odd Number Poster Presenters in Front of Their Boards

4:15 PM – 5:00 PM

Even Numbers Poster Presenters in Front of Their Boards

**3:45 PM – 4:00 PM Theater Session**

**Room: Stolz 1, Ground Floor**



Aptissen Academy: Navigating Parameters for Orthobiologics Treatment Efficacy

**4:10PM – 4:25 PM Theater Session**

**Room: Stolz 2, Ground Floor**



PRECISION THAT INSPIRES

Image Cyto4metry on Bone Sections and Osteoclast Cultures4

**5:00 PM – 6:30 PM Concurrent Session 5: Molecular Circuits Regulating Joint Destruction**

**Room: Strauss 1,2,3, Ground Floor**

*Moderators: Seungwoo Han & Chunyi Wen*

- 5:00 PM – 5:40 PM **Key Signaling Circuits Driving OA Progression**  
*Di Chen*
- 5:40 PM – 5:50 PM 38 PEROXISOME PROLIFERATOR-ACTIVATED RECEPTOR A IS A DISEASE-MODIFYING TARGET FOR OSTEOARTHRITIS  
Beatriz Carames
- 5:50 PM – 6:00 PM 39 A NOVEL GENETIC MOUSE MODEL OF AGE-ASSOCIATED OA  
Mick Juryneć
- 6:00 PM – 6:10 PM 40 SUPERFICIAL ZONE CELL DEATH IN ADULT MOUSE LIMB JOINTS LEADS TO EARLY ONSET OSTEOARTHRITIC PROGRESSION  
Danielle Rux
- 6:10 PM – 6:20 PM 41 THE CALCITONIN RECEPTOR PROMOTES BONE TURNOVER AND INFLAMMATION IN A MURINE MODEL OF AGE-DEPENDENT OSTEOARTHRITIS  
Jérôme Weber
- 6:20 PM – 6:30 PM 42 THE ROLE OF MAST CELLS IN OSTEOARTHRITIS  
Jingshu Liu

**5:00 PM - 6:30 PM Concurrent Session 6: Pain: From Basic to Clinical**

**Room: Lehar 1,2,3,4, Ground Floor**



*Moderators: Rik Lories & Joanna Sherwood*

- 5:00 PM – 5:40 PM **Nerve and OA Pain**  
*Hans-Georg Schaible*
- 5:40 PM – 5:50 PM 43 TARGETED ABLATION OF KNEE-INNERVATING NOCICEPTORS REDUCES PAIN AND CARTILAGE DAMAGE IN CHRONIC EXPERIMENTAL OSTEOARTHRITIS  
Lai Wang
- 5:50 PM – 6:00 PM 44 LATENT TRANSITION ANALYSIS OF PAIN PHENOTYPES IN PEOPLE AT RISK OF KNEE OSTEOARTHRITIS  
Y.V. Raghava Neelapala
- 6:00 PM – 6:10 PM 45 HIGHER PAIN VARIATION DURING THE SCREENING PHASE IS ASSOCIATED WITH A LARGER PLACEBO RESPONSE – POST-HOC ANALYSIS OF A PHASE 2B KNEE OSTEOARTHRITIS TRIAL  
Jakob Mejdahl Bentin
- 6:10 PM – 6:20 PM 46 MECHANOSENSITIVE MAS-RELATED G PROTEIN COUPLED RECEPTOR-D EXPRESSING NOCICEPTORS CONTRIBUTE TO PAIN IN SURGICALLY INDUCED MURINE OSTEOARTHRITIS.  
Alia Obeidat
- 6:20 PM – 6:30 PM 47 ORAL GAVAGE OF DELTA-9-TETRAHYDROCANNABINOL PROVIDES PAIN AND DISEASE MODIFICATION IN MOUSE MODELS OF KNEE OSTEOARTHRITIS  
Anca Maglaviceanu

**6:45 PM – 8:30 PM Early Career Investigator Meet the Mentor Session**

**Room: Lehar 1,2,3,4, Ground Floor**

*Chairpersons: Anca Maglaviceanu & Rachell Nelligan*

The session creates a friendly environment for mentees to have informal roundtable discussions with enthusiastic mentors on various topics in science and career development.

*\*This session is a ticketed event that includes networking amongst peers and mentors, with drinks and hors d'oeuvres. Registration is required. Space is limited. Please arrive on time to the session for check-in.*

**6:45 PM – 8:30 PM China Germany Night**

**Room: Schubert 4,5,6, 1<sup>st</sup> Floor**



This event aims to foster and strengthen the relationship between Chinese and German researchers in the field of osteoarthritis research and provides an excellent opportunity to network with peers and learn about the latest advancements in the field.

**8:30 PM – 10:30 PM Early Career Investigator Meet the Mentor Session Afterparty\***

**Offsite: Das Glauhaus Restaurant & Bar**

Continue the conversation and networking from the ECI Meet the Mentor Session to the ECI Meet the Mentor Afterparty. This event will take place on **Friday evening, 8:30 – 10:30 pm**, offsite at the Das Glauhaus Restaurant & Bar.

Das Glauhaus Restaurant & Bar  
Am Grünen Prater 11  
1020 Wien, Austria

*\*Space is limited, wristbands to attend this event will be given out to participants of the ECI Meet the Mentor Session. Transportation is not provided by OARSI.*

## Saturday, April 20

**7:30 AM – 8:30 AM Breakfast Workshop C:  
Practical Aspects of Imaging in Clinical Trials: From Radiography to MRI\***

**Room: Schubert 1,2,3, 1<sup>st</sup> Floor**

*Chairpersons: Patrick Omoumi & Frank Roemer*

**Practical Aspects of Imaging in Clinical Trials: Radiography**  
*Ali Guerhazi*

**Practical Aspects of Imaging in Clinical Trials: MRI**  
*Frank Roemer*

*\*There is an additional registration fee and ticket to attend. Space is limited, please see the registration desk for more information and availability.*

**7:30 AM – 8:30 AM Breakfast Workshop D:  
What is the Relationship Between Pain and Emotions?\***

**Room: Schubert 4,5,6, 1<sup>st</sup> Floor**

*Chairperson: Mona-Dvir Ginzberg*

**What is the Relationship Between Pain and Emotions?**  
*Gadi Gilam*

*\*There is an additional registration fee and ticket to attend. Space is limited, please see the registration desk for more information and availability.*

**7:30 AM – 8:30 AM Breakfast Workshop G:  
OARSI/ASBMR Joint Workshop\***

**Room: Stolz 2, Ground Floor**

*Moderators: Gun-il Im & Jennifer Westendorf*

**Novel Approaches to Studying Bone and Joints**  
*Hang Lin*  
*Caitlyn Collins*

*\*There is an additional registration fee and ticket to attend. Space is limited, please see the registration desk for more information and availability.*

**8:45 AM – 10:15 AM Concurrent Session 7: Clinical Aspects and Outcomes in OA**

**Room: Strauss 1,2,3, Ground Floor**

*Moderators: Armaghan Mahmoudian & Grace Lo*

**8:45 AM – 9:25 AM Sarcopenic Obesity: Why Is It Important in OA?**  
*Kristine Godziuk*

**9:25 AM - 9:35 AM 48 WORK-RESTRICTING MUSCULOSKELETAL PAIN IN PATIENTS TREATED WITH BARIATRIC SURGERY OR USUAL OBESITY CARE — RESULTS FROM SWEDISH OBESE SUBJECTS, A CONTROLLED INTERVENTION STUDY WITH 20 YEARS FOLLOW-UP**  
*Stefan Lohmander*

## OARSI 2024 World Congress on Osteoarthritis Program

9:35 AM - 9:45 AM	49 A COMPARISON OF SURGICAL OUTCOME AND EQUITABLE ACCESS FOR HIP, KNEE AND LUMBAR SPINE SURGERY FOR ENDSTAGE OSTEOARTHRITIS. Y. Raja Rampersaud
9:45 AM - 9:55 AM	50 EFFICACY OF XT-150, A NOVEL NON-VIRAL GENE THERAPY DELIVERING IL-10v, ON MODERATE TO SEVERE PAIN DUE TO KNEE OSTEOARTHRITIS: PATIENT SUBGROUP ANALYSIS Howard Rutman
9:55 AM – 10:05 AM	51 SGLT2 INHIBITORS VS. GLP1 AGONISTS AS TREATMENTS FOR OSTEOARTHRITIS S. Reza Jafarzadeh
10:05 AM - 10:15 AM	52 THE OARSI JOINT EFFORT INITIATIVE'S PRIORITIES FOR OSTEOARTHRITIS MANAGEMENT PROGRAM IMPLEMENTATION AND RESEARCH 2024-2028 Jocelyn L. Bowden

### 8:45 AM – 10:15 AM Concurrent Session 8: Beyond Hip and Knee OA

Room: Lehar 1,2,3,4, Ground Floor

*Moderators: Martin van der Esch & Margreet Kloppenburg*

8:45 AM – 9:25 AM	<b>Molecular Pathways in Intervertebral Disc Degeneration and Facet Joint OA</b> <i>Raja Rampersaud</i>
9:25 AM - 9:35 AM	53 METHODS - A RANDOMIZED CONTROLLED TRIAL OF METHOTREXATE TO TREAT HAND OSTEOARTHRITIS WITH SYNOVITIS: A POST-HOC ANALYSIS Flavia Cicuttini
9:35 AM - 9:45 AM	54 METABOLIC SYNDROME IS ASSOCIATED WITH MORE PAIN IN HAND OSTEOARTHRITIS: RESULTS FROM THE DIGICOD COHORT Alix Charton
9:45 AM - 9:55 AM	55 CHRONIC EROSIVE HAND OSTEOARTHRITIS PATIENTS HAVE HIGHER RISK TO EXPERIENCE SEVERE PAIN THAN TREATED RHEUMATOID ARTHRITIS PATIENTS: A COMPARATIVE STUDY BETWEEN DIGICOD AND ESPOIR COHORTS Alice Courties
9:55 AM – 10:05 AM	56 DETERMINATION OF AN EPIGENETIC POLYGENIC RISK SCORE TO PREDICT RECOVERY FROM PAIN FOLLOWING SURGICAL INTERVENTION FOR LUMBAR SPINAL STENOSIS DUE TO SPINE OSTEOARTHRITIS Y. Raja Rampersaud
10:05 AM - 10:15 AM	57 THE RELATIVE IMPORTANCE OF STRUCTURAL CHANGES OF RADIOGRAPHIC OSTEOARTHRITIS AND PAIN IN MULTIPLE SITES: THE JOHNSTON COUNTY OSTEOARTHRITIS PROJECT Amanda E. Nelson

### 10:15 AM – 10:45 AM NETWORKING BREAK with EXHIBITORS

Room: Hall B, Ground Floor

### 10:20 AM – 10:35 AM Theater Session

Room: Stolz 1, Ground Floor



New Insights in Viscosupplementation Effects on Cartilage Properties Improvement

**10:45 AM – 12:15 PM Plenary Session 5: Bioengineering and Advanced Materials in OA**

**Room: Strauss 1,2,3, Ground Floor**

*Moderators: Mona Dvir-Ginzberg & Barbara Chan*

- 10:45 AM – 11:25 AM **Strategies in Cell-Matrix Regeneration**  
*Sylvia Nürnberger*
- 11:25 AM – 11:35 AM 58 LIPOSOMAL INTRA-ARTICULAR GEL PROVIDES COMPONENTS FOR ULTRA-LOW FRICTION IN THE SYNOVIAL JOINT, THUS IMPROVING CLINICAL AND FUNCTIONAL OUTCOMES OF PATIENTS WITH OSTEOARTHRITIS  
Pawel Bakowski
- 11:35 AM – 11:45 AM 59 EFFICACY OF A BIODEGRADABLE POLYMER-BASED IL-1RA FORMULATION AFTER INTRA-ARTICULAR DELIVERY IN A RAT ACLT OA MODEL  
Sylvestre Grizot
- 11:45 AM – 11:55 AM 60 ALLOGRAFT ADIPOSE MATRIX INCREASES IL-10 WITHOUT SIGNIFICANTLY ALTERING OTHER MEDIATORS OF OSTEOARTHRITIS  
Andrea Karen Persons
- 11:55 AM – 12:05 PM 61 INVESTIGATING THE USE OF INTRA-ARTICULAR INJECTIONS OF GSK3787 FOR OSTEOARTHRITIS  
Ermina Hadzic
- 12:05 PM – 12:15 PM 62 A SINGLE PLACENTA-DERIVED MESENCHYMAL-LIKE STROMAL CELL INJECTION HALTS PROGRESSION OF PRIMARY KNEE OSTEOARTHRITIS – FIRST PRECLINICAL RESULTS FROM THE PROTO CONSORTIUM  
Tazio Maleitzke

**12:30 PM – 2:00 PM Early Career Investigator (ECI) Luncheon Workshop: Perfecting Your Elevator Pitch\***

**Room: Lehar 1,2,3,4, Ground Floor**

*Chairpersons: Matt Harkey & Brooke Patterson*

**The Art of the Elevator Pitch**

*Jackie Whittaker*

*Erin Macri*

**Elevator Pitch Examples**

*Jamie Collins*

*Tom Appleton*

*\*This session is a ticketed event that includes networking amongst peers and mentors, with lunch provided.*

*Registration is required. Space is limited. Please arrive on time to the session for check-in.*

**2:00 PM - 3:30 PM Concurrent Session 9: News in Therapies**

**Room: Strauss 1,2,3, Ground Floor**

*Moderators: Jean Liew & Nancy Lane*

- 2:00 PM – 2:40 PM **Rediscovering Botulinum Toxin in OA**  
*Christelle Nguyen*
- 2:40 PM – 2:50 PM 63 EFFICACY OUTCOMES IN PATIENTS WITH KNEE OSTEOARTHRITIS: PER-PROTOCOL ANALYSES FROM SPRINGBOARD, A PHASE 2, RANDOMIZED, 24-WEEK STUDY OF EP-104IAR (LONG-ACTING INTRA-ARTICULAR INJECTION OF FLUTICASONE PROPIONATE)  
James A. Helliwell
- 2:50 PM – 3:00 PM 64 DICKENS: A MULTICENTRE RANDOMIZED CONTROLLED TRIAL OF DIACEREIN FOR KNEE OSTEOARTHRITIS WITH EFFUSION-SYNOVITIS  
Dawn Aitken
- 3:00 PM – 3:10 PM 65 EFFICACY AND SAFETY OF AN INTRA-ARTICULAR PLACENTAL TISSUE PARTICULATE (MOTYS/PTP-001) IN SYMPTOMATIC KNEE OSTEOARTHRITIS OVER 26 WEEKS: A PLACEBO-CONTROLLED, DOUBLE-BLIND RANDOMIZED CLINICAL TRIAL  
Alessandra Pavesio
- 3:10 PM – 3:20 PM 66 EFFECTS OF PENTOSAN POLYSULFATE SODIUM ON CLINICAL OUTCOMES AND DISEASE MODIFYING BIOMARKERS IN MODERATE TO SEVERE KNEE OSTEOARTHRITIS  
Mukesh Ahuja
- 3:20 PM – 3:30 PM 67 A RANDOMIZED PLACEBO-CONTROLLED TRIAL OF ORAL RESVERATROL FOR PATIENTS WITH PAINFUL KNEE OSTEOARTHRITIS (ARTHROL)  
Christelle Nguyen

**2:00 PM – 3:30 PM Concurrent Session 10: Molecular Drivers of OA**

**Room : Lehar 1,2,3,4, Ground Floor**

*Moderators: Raghu Yammani & Ingrid Meulenbelt*

- 2:00 PM – 2:40 PM **Phagocyte-Induced Fibroblast Gene Activation: Novel Insights in Regenerative Medicine**  
*Thomas Lozito*
- 2:40 PM – 2:50 PM 68 EXAMINING THE ROLE OF SIRT1 CLEAVAGE ON AGE-DEPENDENT OA PROGRESSION FOR MALE MICE  
Mona Dvir-Ginzberg
- 2:50 PM – 3:00 PM 69 INTRA-ARTICULAR ADMINISTRATION OF AGRIN INDUCES RAPID AND SUSTAINED PAIN RELIEF IN OSTEOARTHRITIS  
Suzanne Eldridge
- 3:00 PM – 3:10 PM 70 LOSS OF MITOCHONDRIAL UNFOLDED PROTEIN RESPONSE CHAPERONIN AGGRAVATES CHONDROCYTE CATABOLISM AND OSTEOARTHRITIC DEGENERATION  
Yu Shan Chen
- 3:10 PM – 3:20 PM 71 IDENTIFICATION AND CHARACTERIZATION OF MIR-126-3P AS A DIAGNOSTIC BIOMARKER, MECHANISTIC DRIVER, AND THERAPEUTIC TARGET FOR KNEE OSTEOARTHRITIS  
Thomas G. Wilson
- 3:20 PM – 3:30 PM 72 MANGANESE DIOXIDE NANOZYMES AS AN ROS SCAVENGING THERAPY FOR OSTEOARTHRITIS  
Jessica Aldrich



**3:30 PM – 5:00 PM POSTER SESSION 2 & NETWORKING WITH EXHIBITORS**

**Room: Hall B, Ground Floor**



3:30 PM – 4:15 PM

Odd Number Poster Presenters in Front of Their Boards

4:15 PM – 5:00 PM

Even Numbers Poster Presenters in Front of Their Boards

**5:00 PM – 6:00 PM Plenary Session 6 – DEBATE**

**Room: Strauss 1,2,3, Ground Floor**

*Moderators: Ida Haugen & Ali Mobasheri*

**Steroid Intra Articular Joint Injection in OA: Pro vs. Con**

*Margreet Kloppenburg (Pro) vs. David Hunter (Con)*

**6:00 PM – 6:50 PM Late Breaking Oral Abstract Podium Session**

**Room: Strauss 1,2,3, Ground Floor**

*Moderators: Mona Dvir-Ginzberg & Muneaki Ishijima*

6:00 PM – 6:10 M

LB-1 SEMAGLUTIDE 2.4 MG EFFICACY AND SAFETY IN PEOPLE WITH OBESITY AND KNEE OSTEOARTHRITIS: RESULTS FROM THE STEP 9 RANDOMISED CLINICAL TRIAL  
Henning Bliddal

6:10 PM – 6:20 PM

LB-2 CRYOGENIC PHASE-ENHANCED X-RAY IMAGING OF UNFIXED, INTACT MOUSE KNEES REVEALS SHIFTING CHONDROCYTE PHENOTYPES AT THE OSTEOARTHRITIC ENDOCHONDRAL INTERFACE  
Lucinda Evans

6:20 PM – 6:30 PM

LB-3 SERUM INTESTINAL PERMEABILITY BIOMARKERS ARE ASSOCIATED WITH EROSIIVE HAND OSTEOARTHRITIS AND RADIOGRAPHIC SEVERITY: RESULTS FROM THE DIGICOD COHORT  
Marie Binvignat

6:30 PM – 6:40 PM

LB-4 POST-TRAUMATIC OSTEOARTHRITIS MODEL IN AGED RATS ASSOCIATED WITH FUNCTIONAL BRAIN CHANGES  
Jacob Griffith

6:40 PM – 6:50 PM

LB-5 CR10049, THE FIRST OA-TARGETED KINASE INHIBITOR, IMPROVES PAIN BEHAVIOUR, RESOLVES INFLAMMATION AND PRESERVES JOINT STRUCTURE IN SMALL AND LARGE ANIMAL MODELS  
Tiziana Piepoli

**7:30 PM – 10:30 PM Offsite Dinner Event\***

**Offsite: Luftburg – Kolarik in the Prater**

Join your fellow OARSI colleagues for a night of fun and networking at the OARSI Offsite Dinner Event! Take advantage of an opportunity to engage with OARSI colleagues across all career stages.

**Luftburg – Kolarik in the Prater**  
[Prater 128, Waldsteingartenstrasse](#)  
[1020 Vienna](#), Austria

This event is a ticketed event that includes networking amongst peers and mentors, with dinner and drinks provided.

Please ensure you show your ticket for entrance into the event. Transportation is not provided by OARSI.

*\*There is an additional registration fee and ticket to attend. Space is limited, please see the registration desk for more information and availability.*

## Sunday, April 21

**7:30 AM – 8:30 AM Breakfast Workshop E: Preventing Osteoarthritis After an Anterior Cruciate Ligament Injury: An Osteoarthritis Action Alliance Consensus Statement\***

**Room: Schubert 4,5,6, 1<sup>st</sup> Floor**

*Chairpersons: Ali Mobasheri & Elizabeth Wellsandt*

**Mechanisms for Osteoarthritis Progression and Opportunities for Intervention After ACL Injury**  
*Elizabeth Wellsandt*

**OAAA Consensus Statement and Recommendations to Mitigate Osteoarthritis After ACL Injury**  
*Laura Schmitt*

*\*There is an additional registration fee and ticket to attend. Space is limited, please see the registration desk for more information and availability.*

**7:30 AM – 8:30 AM Breakfast Workshop F: Exploring OA Biology Through the Synovial Fluid\***

**Room: Schubert 1,2,3, 1<sup>st</sup> Floor**

*Chairperson: Tonia Vincent*

**An Introduction to Synovial Fluid and Its Analysis**  
*Tonia Vincent*

**Using Synovial Fluid to Search from Molecular Endotypes in OA**  
*Thomas Perry*

**Synovial Fluid Bioactivity to Explore OA Biology**  
*Tim Welting*

*\*There is an additional registration fee and ticket to attend. Space is limited, please see the registration desk for more information and availability.*

**8:45 AM – 10:15 AM Concurrent Session 11:  
Advanced Bioinformatic and Multiomic in OA Research**

**Room: Lehar 1,2,3,4, Ground Floor**

*Moderators: Marie Binvignat & Anca Maglaviceanu*

**8:45 AM – 9:25 AM ApprOAching Endotypes in OA**  
*Jaume Bacardit*

9:25 AM - 9:35 AM 73 IMMUNOLOGICAL PROFILING OF PAIN IN KNEE OSTEOARTHRITIS: TREG CELLS AS POTENTIAL NEW KEY PLAYERS IN SYMPTOMATIC KNEE OSTEOARTHRITIS.  
Marie Binvignat

9:35 AM - 9:45 AM 74 SYNOVIAL FLUID BASED MOLECULAR ENDOTYPES IN KNEE OSTEOARTHRITIS: FULL PRIMARY ANALYSIS FROM THE STEPUp OA CONSORTIUM  
Yun Deng

9:45 AM - 9:55 AM 75 SPATIAL AND MORPHOMETRIC ANALYSIS OF OSTEOARTHRITIS-RELATED HISTOLOGICAL CHANGES IN RODENTS USING DEEP-LEARNING  
Jacob Lee Griffith

9:55 AM – 10:05 AM 76 AN ATLAS OF THE SYNOVIUM IN KNEE OSTEOARTHRITIS: FIBROBLAST ACTIVATION DEFINES DISEASE PROGRESSION  
Kabriya Thavaratnam

10:05 AM - 10:15 AM 77 LONGITUDINAL STABILITY OF MOLECULAR ENDOTYPES OF KNEE OSTEOARTHRITIS PATIENTS FROM THE APPROACH COHORT  
Monica Toft Hannani

**8:45 AM – 10:15 AM Concurrent Session 12:  
Beyond the Joint: Systemic Context, Co-Morbidities and Other Organs**

**Room: Strauss 1,2,3, Ground Floor**

*Moderators: Larry Moreland & Andrea Dellisola*

**8:45 AM – 9:25 AM Going into the Brain to Decipher Joint Pain**  
*Dorothee Auer*

9:25 AM - 9:35 AM 78 THE IMPACT OF AN INTERVENTION FOR OSTEOARTHRITIS BASED ON EXERCISE AND EDUCATION ON METABOLIC HEALTH: A REGISTER-BASED STUDY  
Simone Battista

9:35 AM - 9:45 AM 79 EXPLORING ASSOCIATIONS BETWEEN PRO-INFLAMMATORY CYTOKINES, OBESITY ASSOCIATED OSTEOARTHRITIS, AND GUT MICROBIOME COMPOSITION USING MACHINE LEARNING  
Cameron Edward Kurz

9:45 AM - 9:55 AM 80 NO OBSERVABLE DIFFERENCES IN THE GUT MICROBIOME OF OSTEOARTHRITIS PATIENTS  
Kajetana Bevc

9:55 AM – 10:05 AM 81 OSTEOARTHRITIS AND SEVERE CARDIOVASCULAR DISEASE - A SHARED ETIOLOGY?  
Karin Magnusson

10:05 AM - 10:15 AM 82 EARLY- AND LATE-STAGE OSTEOARTHRITIS PATIENTS EXHIBIT AN AUTONOMIC DYSFUNCTION  
Rebecca Sohn

**10:15 AM – 10:30 AM NETWORKING BREAK**

**Room: Foyer of Strauss 1,2,3, Ground Floor**

**10:30 AM - 12:15 PM Plenary Session 7: YEAR IN REVIEW**

**Room: Strauss 1,2,3, Ground Floor**



*Moderators: Jérémie Sellam & Mona Dvir-Ginzberg*

10:30 AM – 10:45 AM **OA Clinical: Epidemiology and Therapy**  
*Alice Courties*

10:45 AM – 11:00 AM **Imaging**  
*Daichi Hayashi*

11:00 AM – 11:15 AM **Rehabilitation & Outcomes**  
*Belinda Lawford*

11:15 AM – 11:30 AM **Biomechanics in OA**  
*Annegret Mündermann*

11:30 AM – 11:45 AM **Biomarkers**  
*Ron K. June*

11:45 AM – 12:00 PM **Genetics, Genomics, and Epigenetics**  
*Cindy Boer*

12:00 PM – 12:15 PM **OA Biology**  
*Frank Zaucke*