[1]University of Eastern Finland, Kuopio, Finland. [2]Kuopio University Hospital, Kuopio, Finland. [3]University of Oulu, Oulu, Finland

EO.4.S3-O5 Innovative electrospun scaffolds for tendon regeneration: a novel approach to prevent post-surgical fibrosis.
Francesca Romano[1,2], Francesco Lopresti[2], Chiara Di Marco[2], Vincenzo La Carrubba[2], Roberto Di Gesù[3]
[1]Ri.MED Foundation, Palermo, Italy. [2]Department of Engineering, University of Palermo, Palermo, Italy. [3]Fondazione Ri.MED, Palermo, Italy

EO.4.S3-O6 Frozen-storable mesenchymal stem cell scaffold for promoting rotator cuff tendon-bone interface healing: New hope for elderly patients with chronic rotator cuff injury.
Bingyan Li[1], Lang Bai[1], Shuai Wang[1], Zhanhai Yin[1], Xu Meiguang[2]
[1]The First Affiliated Hospital of Xi'an Jiaotong University, Xi'an, China. [2]The First Affiliated Hospital of Xi'an Jiaotong University, China

EO.4.S3-O7 Achilles tendinopathy treatment via circadian rhythm regulation
Yibo Zhang, Qing Jiang, Xingquan Xu
Nanjing Drum Tower Hospital, Affiliated Hospital of Medical School, Nanjing University, Nanjing, China

EO.5.S3 – OSTEOARTHIRITIS: OSTASKILLS
Holistic approach to understanding and managing osteoarthritis

15:30 - 17:00 Monday, 16th June, 2025
Chair: Denitsa Docheva, Corne Baatenburg de Jong

EO.5.S3-K13 In vitro differentiation of cells with chondrogenic potential
Brian Johnstone
Oregon Health Science University, Department Of Orthopedics Rehabilitation, Portland, USA

EO.5.S3-O1 A nasal chondrocyte-based inflammation-resistant therapy approach for osteoarthritis.
Atharva Damle[1], Ksenia Sovdagarova[1], Boris Dasen[1], Andre Tiaden[1,2], Stavros Giaglis[1,2], Petros Ismailidis[2], Florian Imhoff[2], Diego Kyburz[1,2], Tim Welting[3], Ivan Martin[1,2], Andrea Mainardi[1], Andrea Barbero[1,2]
[1]University of Basel, Basel, Switzerland. [2]University Hospital Basel, Basel, Switzerland. [3]University of Maastricht, Maastricht, Netherlands

EO.5.S3-O2 Targeting Chondromodulin-I (Cnmd) for Novel Osteoarthritis Interventions: *In Vivo* and 3D Model Insights.

Viviana Reyes Alcaraz[1], Girish Pattappa[1], Sigrid Müller-Deubert[1], Carolina Serrano Larrea[2], Nguyen Xuan Thanh Le[2], Maximilian Rudert[1], Marcel Karperien[2], Denitsa Docheva[1]

[1]Department of Musculoskeletal Tissue Regeneration and Department of Orthopaedics, Orthopaedic Hospital König-Ludwig-Haus, University of Würzburg, Würzburg, Germany. [2]Department of Developmental BioEngineering, Faculty of Science and Technology and TechMed Centre, University of Twente, Enschede, Netherlands

EO.5.S3-O3 Peptide as an anti-inflammatory drug for the treatment of Osteoarthritis.

Abdullah khalid[1], Adhiambo M witlox[2], Guus GH van den Akker[1], Marjolein MJ caron[1], Tim JM welting[1,2]

[1]Laboratory for Experimental Orthopedics, Department of Orthopedic Surgery, Caphri School for Public Health and Primary Care, Maastricht University, Maastricht, Netherlands. [2]Laboratory for Experimental Orthopedics, Department of Orthopedic Surgery, Maastricht University Medical Center, Maastricht, Netherlands

EO.5.S3-O4 Developing a cartilage-on-chip platform for osteoarthritis.

Nguyen Xuan Thanh Le[1], Bram Zoetebier[1], Atharva Damle[2], Andrea Barbero[2], Ivan Martin[2], Elsa Lauwers[3], Carlo Alberto Paggi[3], Marcel Karperien[1]

[1]University of Twente, Enschede, Netherlands. [2]University of Basel, Basel, Switzerland. [3]chrn on-chip biotechnologies B.V., Maastricht, Netherlands

EO.5.S3-O5 Injectable hydrogels for VHH delivery to restore joint homeostasis.

Carolina Serrano Larrea, Lisanne Morshuis, Lin Zhong, Marjorie Zambonino, Thanh Le, Fleur Semmekrot, Bram Zoetebier, Marcel Karperien
University of Twente, Enschede, Netherlands

EO.5.S3-O6 Improving 3D Scaffold Design for a Cell-Based Cartilage Regenerative Model

Laura Mecchi[1,2], Marjolein M. J. Caron[2], Tim J. M. Welting[2,3], Martin J. Stoddart[1]

[1]Progenitor Cell Biology Group, Regenerative Orthopaedics Department, AO Research Institute Davos, Clavadelerstrasse 8, 7270 Davos, Switzerland. [2]Laboratory for Experimental Orthopedics, Department of Orthopedic Surgery, Caphri School for Public Health and Primary Care, Maastricht University, Universiteitssingel 50, 6229 ER Maastricht, Netherlands. [3]Laboratory for Experimental Orthopedics, Department of Orthopedic Surgery, Maastricht University Medical Center, P.O. Box 5800, 6202 AZ Maastricht, Netherlands

EO.5.S3-O7 Focal Knee Resurfacing Implant: A Promising Approach in the Management of Osteoarthritis.

Amin Abrishamkar[1], Alex K Roth[1,2], Erkan E Asik[2], Tim JM Welting[1], Peter J Emans[1,2,3]
[1]Department of Orthopedic Surgery, Research School CAPHRI, Maastricht University, Maastricht, Netherlands. [2]Avalanche Medical BV, Maastricht, Netherlands. [3]Department of Orthopedic Surgery, Joint Preservation Clinic, Maastricht University Medical Center, Maastricht, Netherlands

EO.5.S3-O8 Dynamic compression and shear activates TGFβ-1 and promotes the chondrogenesis of human bone marrow mesenchymal stromal cells (hBMSCs) in GelMA scaffolds.
Maria Carolina Grenho Leal Cordeiro[1,2], Andrea Barbero[3], Martin James Stoddart[1]
[1]AO Research Institute, Davos, Switzerland. [2]Faculty of Medicine, University of Basel, Basel, Switzerland. [3]Department of Biomedicine, University of Basel, University Hospital Basel, Basel, Switzerland

EO.6.S3 – CLINICAL
Translational Skeletal Trauma Surgery

15:30 - 16:55 Monday, 16th June, 2025
Chair: Peter Helmut Thaller, Wilhelm Friedl

EO.6.S3-K14 Consequences of Biomechanical and Clinical Studies for Proximal Femur Fractures Osteosynthesis.
Wilhelm Friedl
GKK Osteosynthese International, Aschaffenburg, Germany

EO.6.S3-O1 Biomechanical considerations for the treatment of (geriatric) pelvic ring fractures.
Rene Hartensuer
Klinikum Aschaffenburg-Alzenau, Aschaffenburg, Germany

EO.6.S3-O2 First Results of Intramedullary Compression/Distraction for Closed Consolidation and Lenghtening in Femoral Pseudarthrosis.
Peter Helmut Thaller
3D-Surgery and Clinical Tissue Regeneration Department of Orthopaedics and Trauma Surgery Musculoskeletal University Center Munich (MUM) LMU University Hospital, Munich, Germany. 3D-Surgery at Bethel Hospital Berlin, Berlin, Germany
EO.6.S3-O3 Nail and cable assisted bone transport – Novel approaches
Dennis Vogt[1], Marcus Stichling[1], Denis Siebert[2], Christian Willy[1]
[1]Military Hospital, Berlin, Germany. [2]K-Implant, Garbsen, Germany

EO.6.S3-O4 Minimal Invasive Fixation of Osteoporotic Fractures wit a Symphysis Plate (SYP).