



HEIDELBERG
UNIVERSITY
HOSPITAL

FOURTH E.S.T.R.O.T. CONGRESS

European Society of Tissue Regeneration in Orthopaedics and Traumatology

Chairman: ***Gerhard Schmidmaier***



PRELIMINARY PROGRAM

16-17-18 July 2018

Kongresshaus Stadthalle, Heidelberg

President
Gerhard Schmidmaier

Past - President
Giorgio Maria Calori



Vice President
Peter V. Giannoudis

Treasurer
Thierry Bégué

EXHIBITORS

(As of now)

PLATINUM



GOLD

Heraeus

BRONZE



OTHERS



FACULTY

Akbar Michael - Heidelberg, DE

Aktuglu Kemal - Izmir, TK

Arts Chris - Maastricht, NL

Ascherl Rudolf - Nordoberpfalz, DE

Aydingoz Onder - Istanbul, TK

Bégué Thierry - Paris, FR

Bentley George - London UK

Blokhus Taco - Maastricht, NL

Bumbasirevic Marko - Belgrade, Serbia

De Schepper Jo - Sint-Niklaas, B

Diefenbach M.- Lund, S

Dreher Thomas - Heidelberg, DE

El-Jawhari Jeehan - Leeds, UK

Fischer Christian - Heidelberg, DE

Forriol Francisco - Madrid, ES

Giannoudis Peter - Leeds, UK

Grossner Tobias - Heidelberg, DE

Gruetzner Paul Alfred - Ludwigshafen, DE

Guerado Enrique - Malaga, ES

Hoffmann R. - Frankfurt, DE

Hoffmeyer Pierre - Geneva, CH

Jones Elena - Leeds, UK

Kasperk Christian - Heidelberg, DE

Kayaokay Kemal - Izmir, TK

Kneser Ulrich - Ludwigshafen, DE

Krettek Christian - Hannover, DE

Larsson Sune - Uppsala, S

Lehner Burkhard - Heidelberg, DE

Liccardo Marco - Rome, IT

Marzi Ingo - Frankfurt, DE

McNelly Martin - Heidelberg, DE; Oxford, GB

Miska Matthias - Heidelberg, DE

Moghaddam Arash - Aschaffenburg, DE

Moradi, Babak - Heidelberg, DE

Müller Christof - Karlsruhe, DE

Ollila Fredrik - Turku, FIN

Panagiotopoulos Elias - Patras, GR

Pape Hans Christoph - Zurich, CH

Poeze Martijn - Maastricht, NL

Pohlemann Tim - Homburg, DE

Raaben Marco - Utrecht, NL

Regazzoni Pietro - Lugano, CH

Rüger Johannes - Hamburg, DE

Russo Arcangelo - Negrar, IT

Salo Jari - Helsinki, FIN

Schaser Klaus - Dresden, DE

Schmidmaier Gerhard - Heidelberg, DE

Schmidt Volker - Ludwigshafen, DE

Stange Richard - Münster, D

Suda Arnold - Mannheim, DE

Tanner Michael - Heidelberg, DE

Tarantino Umberto - Rome, IT

Trampuz Andrej - Berlin, DE

Vaquero Javier - Madrid, S

Verdonk Réné - Ghent, B

Verhofstad Michiel - Rotterdam, NL

Wagner Frithjof - Murnau, DE

Wildemann Britt - Jena, DE

Zimmermann Gerald - Mannheim, DE

Local Organiser: **Tobias Grossner** - Heidelberg, DE

Poster Presentations

Abazovic Dzihan - Belgrade, Serbia

Anastasiou Antonios - Leeds, UK

Boga Michele - Milan, IT

Durak Aslihan - Bursa, TK

El-Jawhari Jeehan - Leeds, UK

Eguiran Santiago - ES

Liccardo Marco - Rome, IT

Howe James - USA

Pace Fabrizio - Milan, IT

Sciarretta Fabio V - Rome, IT

Zorzi Claudio - Negrar, IT



08:00 - 08:45 Registration

08:45 - 09:00 Venue Opening - **G. Schmidmaier**

09:00 - 09:30 **Key Note Lecture 1.A:** Induced membrane: The Leeds experience and lessons learned
P. Giannoudis

09:30 – 10.00 **Key Note Lecture 1.B:** Mechanoperception of the endocrine organ bone - **Ch. Kasperk**

SESSION 1.A - OSTEOPOROSIS

Chairmen: **S. Larsson, Ch. Kasperk, E. Panagiotopoulos**

10:00 - 10:15 Studies on the mineralization and morphology of the trabecular osteoporotic bone - **E. Guerado**

10:15 - 10:30 Clinical experience with a novel local osteo-enhancement procedure to treat osteoporotic bone loss in the proximal femur - **J. De Schepper**

10:30 - 10:45 Stabilization of osteoporotic fractures - **S. Larsson**

10:45 - 11:00 Tips and tricks by the use of RIA in osteoporotic bone - **M. Poeze**

11:00 - 11:15 **Coffee Break 1**



11:15 - 11:30 **Key Note Lecture 1.C:** The need for antibiotics loaded cements - *M. Diefenbach*

11:30 - 11:45 **Key Note Lecture 1.D:** Local AB in the management of osteomyelitis and infected fractures
M. Mc Nelly

SESSION 1.B - INFECTIONS 1

Chairmen: *F. Wagner, U. Tarantino*

11:45 - 12:00 Management of severe open fractures - *R. Hoffmann*

12:00 - 12:15 Management of Infections after Osteosynthesis - *C. Müller*

12:15 - 12:30 Mangement of the infected spondylodesis after major spine trauma - *M. Akbar*

12:30 - 12:45 Management of infected pelvic and acetabulum ostoesyntheses - *K. Schaser*

12:45 - 14:00 **Lunch Break / Symposium 1.A**

Local treatment of osteitis and infected non unions with local antibiotics
G. Schmidmaier, B. Lehner, M. Mc Nelly

14:00 - 14:30 **Key Note Lecture 1.E:** Infections in Trauma and Orthopaedics - The micobiological perspective
A. Trampuz



SESSION 1.C - INFECTIONS 2

Chairmen: *M. Poeze, A. Trampuz, F. Forriol*

14:30 - 14:45 Treatment of periprosthetic infections - one step versus two steps? - *R. Ascherl*

14:45 - 15:00 Two-stage revision of infected total knee arthroplasty - *M. Kayaokay*

15:00 - 15:15 Management of non unions in pelvic and acetabulum - *T. Pohleman*

15:15 - 15:45 Key Note Lecture 1.F: Management of Infected Non-Unions - *A. Suda*

15:45 - 16:00 Coffee Break 2

16:00 - 16:30 Key Note Lecture 1.G: Clinical experiences in the use of antibiotic coated implants - *G. Schmidmaier*

16:30 - 17:45 WHAT WOULD YOU DO ? My worst infection cases - *T. Pohleman, M. Verhofstad, G. Schmidmaier*

17.45 – 19.30 POSTER SESSION

1 Alternative treatment in discogenic low back pain through intradiscal platelet rich plasma injections
S. Eguiraun, I. Andia, F. Krappel

2 Real time US guided needle joint puncture and PRP injection technique. Preliminary results
M. Liccardo, V. Piccinni, A. Petrella, S. Pano, V. Pipitone, A. Ursone



- 3 Arthroscopic Biologic Reconstruction of Large Chondral Defect Treatment: Oxy-Flow Trick
M. Boga, R. Milani, E. Battista, V. Corbo, M. D'Errico, U. Alfieri Montrasio, L. Mangiavini
- 4 Autologous cartilage scaffold in chondral lesions of talus
D. Abazovic, G. Gavrilovic, O. Dulic, T. Palibrk, R. Jevtic, D. Stefik, D. Pagnacco, D. Maric
- 5 Tibia as a potential (valuable) source of bone marrow stem cell population; Comparison of tibia versus iliac crest in children and adults
D. Abazovic, D. Maric, I. Stanojevic, M. Milivojevic, R. Jevtic, D. Stefik, D. Vojvodic
- 6 A novel local osteo-enhancement procedure to replace bone lost in the proximal femurs of post-menopausal osteoporotic women
J. Howe, B. Huber, M. Chin, J. Stroncek, R. Cheng, R. Hill, T. Keaveny, K. Engelke, M. Bouxsein, H. Genant
- 7 Use of BMAC combined to morselized bone chips and fibrin glue in nonunion
N. Godi, M. Bonomo, S. Rigotti, G. Piovan, D. Screpis, C. Zorzi
- 8 Evaluation of prognostic outcomes of Sepsis I, Sepsis III, Meds, Mews and Curb-65 criteria in patients with community acquired infection in emergency department - **A. Durak**
- 9 Mid-Term Outcomes of cartilage repair using the LIPO-AMIC Technique - **F. V. Sciarretta**



- 10 PRP in Knee Osteoarthritis: preliminary results looking for standardization in orthopedic practice
*M. Liccardo, V. Piccinni, A. Petrella, S. Pano***
- 11 Near-IR Mode-locked Laser Assisted Sintering and Morphological Engineering of Biomaterials - a new approach for integrative manufacturing of hard-soft tissues for in-theatre use!
*A. Anastasiou, N. Iqbal, E. Al-Shubhe, C. Maddi, J. Addis, T. Edwards, C. Amorese, S. Srafford, N. Hondow, A.P. Brown, C.T.A. Brown, P.V. Giannoudis, A. Jha***
- 12 Serum Inflammatory Cytokines in Long Bone Fractures
*J. El-Jawhari, G. Kleftouris, Y.M. El-Sherbiny, E. Jones, P.V. Giannoudis***
- 13 Re-Fractures after Periprosthetic Femoral Fracture: an evidence always less rare and difficult to treat - *F. Pace***



09:00 - 09:30 **Key Note Lecture 2.A:** Do we need endoprosthetic in the future? Inflammatory pathway of osteoarthritis - *B. Moradi*

09:30 - 10:00 **Key Note Lecture 2.B:** What options do we have for cartilage repair?- *F. Forriol*

SESSION 2.A - CARTILAGE REGENERATION 1

Chairman: *R. Verdonk, J. Salo, G. Bentley*

10:00 - 10:15 Regenerative medicine and surgery: PRP management - *M. Liccardo*

10:15 - 10:30 Meniscus Allograft versus Meniscus repair - *R. Verdonk*

10:30 - 10:45 Autologous and micro-fragmented adipose tissue for the treatment of diffuse degenerative knee osteoarthritis - *A. Russo*

10:45 - 11:00 New strategies in the treatment of posttraumatic articular destruction using allografts - *C. Krettek*

11:00 - 11:15 **Coffee Break 1**

11:15 - 11:45 **Key Note Lecture 2.C:** Antimicrobial resistance - a global health threat in orthopaedics and trauma surgery - *C. Arts*



SESSION 2.B - BONE REGENERATION 1

Chairman: *P. Giannoudis, C. Arts, E. Jones*

11:45 - 12:00 Evidence in the use of scaffolds in bone defect filling - *J. Rüger*

12:00 - 12:15 Iliac graft versus RIA - what is the gold standard? - *I. Marzi*

12:15 - 12:30 Delay in weight bearing in surgically treated tibial shaft fractures is associated with impaired healing
M. Raaben

12:30 - 12:45 Masquelet versus distraction osteogenesis - when do I use which technique? – *M. Verhofstad*

12:45 - 14:00 Lunch Break / Symposium 2.A

A new movement in septic non-union management / Bioactive glass in septic bone surgery:
Long term results and new perspectives - *F. Ollila, C. Arts, T. Blokhuis, G. Schmidmaier*

14:00 – 14:30 Key Note Lecture 2.D: Advanced experience with Bioglass in management of osteitis and septic non unions of the limbs - *T. Bégué*



SESSION 2.C - BONE REGENERATION 2

Chairmen: *P. Hoffmeyer, R. Verdonk, G. Zimmermann*

14.30 - 15.00 Stimulation in Bone Healing - a biological perspective - *B. Wildemann*

15.00 - 15:15 Growth factors for the therapy of nonunion - What do we know so far? - *A. Moghaddam*

15:15 - 15:30 Are RIA-MSCs more stressed and pro-apoptotic than bone marrow MSCs? - *J. El-Jawhari*

15.30 - 15:45 Reasons for therapy failure and treatment options after failed nonunion therapy with the diamond concept - *M. Miska*

15:45 - 16:00 Why do polytrauma patients heal different? - *C. Pape*

16:00 - 16:15 Coffee Break 2

16:15 - 16:45 Key Note Lecture 2.E: Soft Tissue Reconstruction after Trauma and Infection - *U. Kneser*

16:45 - 18:00 **WHAT WOULD YOU DO ?** My worst trauma case

P.A. Grützner, C. Krettek, I. Marzi

20.00 - 23.00 Social Dinner



09:00 - 09:30 Breakfast Workshop Coated Biomaterials for infection prophylaxis

09:30 – 10:00 Key Note Lecture 3.A: Scaffolds and bone synthetics - **T. Blokhuis**

10:00 - 10:30 Key Note Lecture 3.B: Soft Tissue Management - Use of Vacuum therapy - **B. Lehner**

SESSION 3.A - SOFT TISSUE MANAGEMENT

Chairmen: **M. Bumbasirevic, E. Guerado, K. Aktuglu**

10:30 - 10:45 Soft Tissue Management after complex deformity surgery in the ICP Patient - **T. Dreher**

10:45 - 11:00 Plastic surgery for severe soft tissue defects using cultured intrinsic vascularized flaps - **V. Schmidt**

11:00 - 11:15 Coffee Break 1

11:15 - 11:30 Key Note Lecture 3.C: Fragility fractures of the pelvis – treatment options and further management
R. Stange

11:30 - 11:45 Key Note Lecture 3.D: Antibiotica loaded bone cements - **M. Tanner**



SESSION 3. B - BONE REGENERATION 3

Chairmen: *T. Bégué, P. Regazzoni, J. Vaquero*

11:45 - 12:00 Mass spectrometry imaging to analyse fracture hematoma - *T. Blokhuis*

12:00 - 12:15 Use of contrast enhanced ultrasound (CEUS) for diagnostic of infected non unions - *C. Fischer*

12:15 - 12:30 MSC based tissue therapy - *G. Zimmermann*

12:30 - 12:45 Advantages of bone retaining around megaprosthesis in non-union of the lower limb - *T. Bégué*

12:45 - 14:00 **LUNCH BREAK / Symposium 3.A**

Bone marrow concentrate for enhancement of bone healing

T. Grossner, G. Schmidmaier

14:00 - 14:30 **Key Note Lecture 3.E**

Future perspectives - Trauma care 2050? - *O. Aydingoz*

14:30 - 14:45 **POSTER PRIZE / AWARDS**

14:45 - 15:00 **VENUE CLOSING - *G. Schmidmaier***

INFORMATION

VENUE Kongresshaus Stadthalle - Neckarstaden, 24 - 69117 Heidelberg, Germany

REGISTRATION (taxes included)	UNTIL 31/05/2018	FROM 1/06/2018
Medical Doctors	€ 350,00	€ 450,00
Students, Residents and Nurses*	free	free
Young Investigators*	free	free
Scientist and researchers	€ 150,00	€ 200,00
Exhibitors	€ 150,00	€ 200,00
One day registration	€ 100,00	€ 150,00
Accompanying partners/family per day	€ 50,00	€ 50,00
Social Dinner	€ 75,00	

* Written and signed proof of status by employer

Cancellation Policy: Registration fees are non refundable

Registration fee includes: *Participation to scientific sessions - Congress bag, lunch and coffee breaks
Badge and certificate of attendance*

CONTACT FOR REGISTRATION: info@keepinternational.net

Estrot Secretariat and Meeting Organization: Keep International

Via G. Vigoni, 11 - 20122 Milan (Italy) Tel. +39 02 54122579

estrot@keepinternational.net - www.keepinternational.net