



3rd ESTROT CONGRESS

European Society of Tissue Regeneration in Orthopedics and Traumatology



Everything you need to know about tissue regeneration

Tendon

Muscle

Bone

Cartilage

Skin

Nerve

Chairman:

Professor Peter Giannoudis

MD, FACS, FRCS

Program

10, 11, 12 July 2017

School of Medicine - University of Leeds



Dear Colleagues and Friends,

It gives me great pleasure to welcome you to the third ESTROT congress in Leeds, one of the recently voted 'best cities in Europe'! Our venue, the University of Leeds, has been awarded the title of the 'Best University' of the UK for 2017.

The congress aims to provide updated information on the latest developments and innovations in all aspects of tissue regeneration. You will be guided through this via a series of key note lectures, round table discussions, demonstration of surgical techniques, industry sponsored symposia and free paper presentations. A renowned faculty of experts ensures that the scientific content will be of the highest standard and the recent advances within this exciting field will be at your disposal.

I hope that you will enjoy your stay In Leeds and you will be inspired not only by the scientific content of the congress but also by our beautiful city.

*Professor Peter Giannoudis MD, FACS, FRCS
Congress Chairman*

President
Gerhard Schmidmaier

Past-President
Giorgio Maria Calori



Vice President
Peter V. Giannoudis

Treasurer
Thierry Bégué

ESTROT SECRETARIAT

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Faculty

- Prof. Aktuglu Kemal** Izmir, Turkey
- Prof. Arts Chris J. J.** Maastricht, Netherlands
- Prof. Aydingoz Onder** Istanbul, Turkey
- Prof. Bégué Thierry** Paris, France
- Prof. Bentley George** London, UK
- Prof. Blokhuis Taco** Maastricht, Netherlands
- Prof. Calori Giorgio Maria** Milan, Italy
- Ms. Douglas Helen** Perth, Australia
- Prof. Durak Kemal** Bursa, Turkey
- Prof. Forriol Francisco** Madrid, Spain
- Mr. Foster Patrick** Leeds, UK
- Prof. Giannoudis Peter** Leeds, UK
- Prof. Guerado Enrique** Malaga, Spain
- Prof. Hangody László** Budapest, Hungary
- Prof. Hart Andrew** Glasgow, UK
- Mr. Harwood Paul** Leeds, UK
- Ms. Hernon Catherine** Leeds, UK
- Prof. Jones Elena** Leeds, UK
- Prof. Johnson Elizabeth** Athens, Greece
- Mr. Kanakaris Nikolaos** Leeds, UK
- Mrs. Kon Elizaveta** Bologna, Italy
- Prof. Krettek Christian** Hannover, Germany
- Prof. Maroudias Nikolaos** Nicosia, Cyprus
- Mr. Mazza Emilio** Milan, Italy
- Prof. McCaskie Andrew** Cambridge, UK
- Prof. McGonagle Dennis** Leeds, UK
- Prof. Richardson James** Oswestry, UK
- Mr. Russell David** Leeds, UK
- Prof. Schmidmaier Gerhard** Heidelberg, Germany
- Prof. Simpson Hamish** Edinburgh, UK
- Prof. Soucacos Panayiotis** Athens, Greece
- Mr. Tosounidis Theo** Leeds, UK
- Prof. Verdonk René** Gent, Belgium
- Prof. Wiberg Mikael** Umea, Sweden
- Mr. Wilks Dan** Leeds, UK
- Mr. Wiper Jay** Leeds, UK
- Prof. Wood David** Leeds, UK
- Prof. Yang Xuebin** Leeds, UK
- Prof. Zimmermann Gerald** Mannheim, Germany

Program

Monday 10 July 2017- DAY ONE

8:00-8:45 Registration of participants

8:45-9:00 Welcome

PART A: TISSUE REGENERATION TECHNIQUES: STATE OF THE ART

CARTILAGE REGENERATION – HOW I DO IT (Video presentation)

Moderators: ***G. Bentley, J. Richardson***

9:00-9:10 Mosaicoplasty - ***L. Hangody***

9:10-9:20 ACI Chondrocyte transplantation - ***G. Bentley***

9:20-9:30 Microfractures - ***F. Forriol***

9:30-9:40 Scaffolds - ***E. Kon***

9:40-9:50 Allograft Implantation - ***C. Krettek***

9:50-10:15 Round Table Discussion

10:15-10:45 **Key note Lecture: The role of Stem cells in bone repair.
Current concepts and future directions
*J. Richardson***

10:45-11:05 Coffee break

BONE REGENERATION FOR CRITICAL SIZE DEFECTS - HOW I DO IT (video presentation)

Moderators: ***H. Simpson, C. Krettek***

11:05-11:15 Distraction osteogenesis - ***P. Harwood***

11:15-11:25 Titanium cages - ***G. Schmidmaier***

11:25-11:35 Masquelet Technique - ***P. Giannoudis***

11:35-10:45 Megaprosthesis - ***G. M. Calori, M. Colombo***

11:45-11:55 Free Fibula - ***P. Soucacos***

11:55-12:15 Round table Discussion - ***All Faculty***

12:15-12:45 **Key note lecture: What's New in Muscle Regeneration Techniques
*T. Blokhuis***

12:45-14:00 **Lunch – Industry Sponsor Symposia (30 minutes x 2)**
Medtronic “Optimisation of open tibial fracture treatment” – **N. Kanakaris**
DePuy Synthes “RIA and bone repair” – **P. Giannoudis**

SKIN REGENERATION - HOW I DO IT (Video presentation)

Moderator: **J. Wiper, P. Soucacos**

14:00-14:10 Split skin graft - **D. Wilks**
14:10-14:20 Dermal Matrices & Growth factors - **D. Russell**
14:20-14:30 Non-cultured autologous cell-based therapy - **H. Douglas**
14:30-14:40 Vascularised fasciocutaneous flaps - **J. Wiper**
14:40-15:00 Round table discussion - **All Faculty**
15:00-15:30 **Key Note Lecture: Posttraumatic articular destruction – Options and limits for corrective osteotomies, biological tissue replacement and tissue engineering - C. Krettek**
15:30-15:45 Coffee Break
15:45-16:05 **Key Note Lecture: Neurobiology underpinning surgical nerve repair A. Hart**

NERVE REGENERATION - HOW I DO IT (Video presentation)

Moderators: **M. Wiberg, A. Hart**

16:05-16:20 Autologous grafting - **C. Hernon**
16:20-16:35 Nerve transfers - **D. Wilks**
16:35-16:50 Periphera l Nerve Regeneration & Repair: The Link to Central Neuroplasticity **E. Johnson**
16:50-17:00 Discussion - **All Faculty**
17:00-17:30 **Key Note Lecture: Evolving techniques and future directions of nerve repair - M. Wiberg**
17:30-17:45 **Summary – Closure Day One**
17:45-18:30 **Annual General Meeting ESTROT**

Tuesday 11 July 2017 - DAY TWO

PART B: ROUND TABLES AND FREE PAPER SESSIONS

Free Paper Session I:

Moderators: *O. Aydingoz, E. Johnson*

- 8:30-8:40 Investigating Co-Culture of Periosteal and Bone Marrow Mesenchymal Stem Cells onto Bone Scaffolds for Critical Size Bone Defect Repair
Presenter: *H. Owston*
- 8:40-8:50 Immunophenotipization and cell quantity in bone marrow aspirate concentrate harvested from proximal tibia
Presenter: *D. Abazovic*
- 8:50-9:00 Identifying the key influencers on the inductive potential of PRP on BM-MSC proliferation
Presenter: *K. Moisley*
- 9:00-9:10 Nanostructure in the trabecular bone and inter-individual gene variants associated with trabecular bone plasticity of postmenopausal women
Presenter: *E. Guerado*
- 9:10-9:20 Investigation of the Total Number of Native Mesenchymal Stem Cells and their Gene Expression Levels from Osteoporotic and Osteoarthritic Femoral Heads. A new treatment strategy for osteoporosis?
Presenter: *R. Singh*
- 9:20-9:30 Discussion
- 9:30-10:30 **Round table Discussion: Application of 'fresh' MSC's for tissue repair - All I need to know**
Faculty: *O. Aydingoz, E. Jones, D. McGonagle, H. Simpson, X. Yang*
- 10:30-10:45 Coffee Break
- 10.45-11.00 **BonAlive Key Note Lecture:** Bioglass and Bone graft combination: what do we expect as antimicrobial activity on vanco and genta resistant strains?
Prof. Lorenzo Drago, University of Milan, Milan, Italy

FREE PAPER SESSION II

Moderators: *L. Hangody, E. Mazza*

- 11:00-11:10 Characterization of human multipotential stromal cells from fracture non-union patients; low levels of surface receptors for licensing cytokines
Presenter: *J. J. El-Jawhari*
- 11:10-11:20 Third-Generation Autologous Chondrocyte Implantation versus Mosaicplasty for Knee Cartilage Injury: two year randomized trial
Presenter: *A. Clavé*
- 11:20-11:30 Understanding healthy ageing in bone marrow resident mesenchymal stem cells (MSCs)
Presenter: *P. Ganguly*
- 11:30-11:40 The effect of cobalt on adhesion molecule expression: a potential mechanism for leukocyte infiltration
Presenter: *S. Anjum*
- 11:40-11:50 Treatment of AVN using the chamber induction technique and biotechnologies: indications and clinical results
Presenter: *M. Colombo*
- 11:50-12:00 Discussion
- 12:00-13:00 **Round Table Discussion: Scaffolds - Bone synthetics - How to choose the right option for my needs**
Faculty: *C. Arts, T. Blokhuis, L. Hangody, N. Kanakaris, E. Kon, E. Jones, D. Wood*
- 13:00-14:15 **BonAlive Biomaterials Lunch Symposium**

FREE PAPER SESSION III

Moderators: *T. Tosounidis, D. Wood*

- 14:15-14:25 A collagen crosslinked sponge provides an enhanced support for attachment, osteogenesis and angiogenesis of human bone marrow multipotential stromal cells
Presenter: *J. J. El-Jawhari*
- 14:25-14:35 Autologous cartilage scaffold in osteochondral lesions: a new concept
Presenter: *D. Abazovic*

- 14:35-14:45 The Highly Proliferative Mesenchymal Cell Fraction : A Novel Subpopulation
Presenter: *I. Pountos*
- 14:45-14:55 The chamber induction technique (C.I.T.) in the use of bone transport to improve the regenerative quality and to heal the septic condition
Presenter: *M. Colombo*
- 14:55-15:05 The chamber induction technique (C.I.T.) for reconstruction and prosthesis
Presenter: *G.M. Calori, M. Colombo, E. Mazza*
- 15:05-15:15 Discussion
- 15:15-16:15 **Round Table Discussion –Use of growth factors in tendon and ligament repair. Do they work?**
Faculty: *K. Durak, F. Forriol, N. Maroudias, P. Soucacos, R. Verdonk, G. Zimmermann*
- 16:15-16:30 Coffee break
- 16:30- 16:50 **Key Note Lecture: Strategies to predict fracture non-union: an update**
T. Bégué

FREE PAPER SESSION IV

MODERATORS: *N. Kanakaris, G. Zimmermann*

- 16:50-17:00 Infected non-union and critical bone defects of the forearm
Presenter: *G. M. Calori, M. Colombo, E. Mazza*
- 17:00-17:10 Efficacy of bio-active glass BAG-S53P4 for the reconstruction of segmental bone defect of septic origin: a comparative study
Presenter: *T. Bégué*
- 17:10-17:20 Distal Leg Septic non union and bone defects associated to soft tissue problems: regenerative medicine and plastic surgery
Presenter: *G. M. Calori, M. Colombo, E. Mazza*
- 17:20-17:30 The Strategy in the treatment on humeral septic nonunions and critical size bone defect
Presenter: *E. Mazza*

- 17:30-17:40 The role of megaprosthesis in the treatment of septic non unions and critical size bone defects
Presenter: G. M. Calori, M. Colombo, E. Mazza
- 17:40-17:50 Discussion
- 17:50-18:00 **Summary – Closure Day Two**
- 19:30 **Congress Dinner**

Wednesday 12 July 2017 – DAY THREE

PART C: ROUND TABLES AND FREE PAPER SESSIONS

- 8:00-9:00 **Round Table Discussion -Preventative strategies for Bone Infection: From prophylactic antibiotics to coated implants - bio-glass, antibiotic loaded scaffolds and much more. But Do they work?**
Faculty: K. Aktuglu, T. Bégué, K. Durak, P. Foster, E. Guerado, G. Schmidmaier, P. Soucacos
- 09:00-9:30 **Key Note Lecture: The role of megaprosthesis in the treatment of infected Long bone non-union and bone defects: What have we learned**
G. M. Calori

FREE PAPER SESSION V

Moderators: **K. Aktuglu, N. Maroudias**

- 9:50-10:00 Is the non-union scoring system classification (NUSS) still valid to describe the case of septic failures?
Presenter: M. Colombo
- 10:00-10:10 COMplex Fracture Orthopedic Rehabilitation (COMFORT) - Ambulatory monitoring of rehabilitation patterns after proximal femur fractures in elderly
Presenter: M. Raaben

- 10:10-10:20 Comparative evaluation of microDTTECT device and flocked swabs in the diagnosis of prosthetic and orthopedic infections
Presenter: M. Colombo
- 10:20-10:30 Discussion
- 10:30-10:45 Coffee break
- 10:45-11:45 **Round Table Discussion – Early osteoarthritis and biological response modifiers: What can we expect?**
Faculty: F. Forriol, L. Hangody, A. McCaskie, P. Soucacos
- 11:45-12:15 **Keynote lecture: Meniscus Allograft or Meniscus Regeneration?**
R. Verdonk
- 12:15-13:00 **Poster Round Presentation**
- 13:00-13:45 **Lunch**
- 13:45-14:00 **Closure of the Congress and Prize presentation**

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INFORMATION

VENUE

Leeds Medical School

Worsley Building,
Floor 7
Clarendon Road
Leeds - UK

REGISTRATION (taxes included)

Medical Doctors	£ 225,00 - € 290,00 for 3 days £ 100,00 - € 130,00 for 1 day
Scientistst and Researchers	£ 100,00 - € 130,00
Medical Students	Free
Industry Attendees	£ 150,00 - € 190,00
Social dinner	£ 50,00 - € 65,00

Fees are taxes included and increased by £ 44 - € 50 after 10/06/2016

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

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