



UNIVERSITY OF LEEDS

Final Program



9TH E.S.T.R.O.T. CONGRESS

Chairman: Professor Peter Giannoudis

**Leeds, UK
30-31 May
1 June 2025**

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TOPIC HIGHLIGHTS

- Stem cells and bone repair
- Growth factors: New inductive molecules better than before?
- Novel biomaterials/scaffolds for bone guided regeneration
- Fracture non-union
- Bone defect treatment
- Augmentation of fragility fractures
- Bone infection-diagnosis and treatment
- New approaches in cartilage regeneration
- Meniscus: Regeneration or Transplantation?
- Nerve regeneration: Latest innovations



Faculty

Mr. Sanjeev Anand
Prof. Chris Arts
Prof. Thierry Begue
Mr. Rahul Bhattacharya
Prof. Taco Blokhuis
Mrs Grainne Bourke
Prof. Giorgio Maria Calori
Mr. Amit Chandratreya
Mr. Paul Harwood
Mr. Matthew Hampton
Dr. Gerard Insley
Prof. Animesh Jha
Prof. Julian Jones

Mr. Nik Kanakaris
Prof. Nina Lindfors
Prof. Nicola Maffulli
Prof. Ingo Marzi
Prof. Hemant Pandit
Mr. Vishal Rajput
Prof. Geoff Richards
Prof. Toney Russell
Prof. Gerhard Schmidmaier
Prof. Hemant Sharma
Prof. Martin Stoddart
Prof. Slobodan Vukicevic
Prof. Mark Wilcox



MAY 30TH

Spotlight lectures
Industry workshops
Reception



MAY 31ST

Spotlight lectures
Round table discussions
Ask the expert sessions
Free paper presentations
Social Dinner



JUNE 1ST

Spot light sessions
Instructional lectures
Free paper presentations
Surgical techniques sessions
Awards Ceremony

PROGRAM STRUCTURE

12:30 - 14:00

Registration

14:00 - 14:05

Welcome - *Prof. P. Giannoudis*

14:05 - 14:30

Spotlight Lecture 1

Bone infection and Antibiotic Treatment: Latest innovations. *Prof. M. Wilcox*

14:30 - 14:50

Spotlight Lecture 2

The art of Bone grafting

Prof. Peter Giannoudis

SESSION I Industry Work Shops

15:15 - 16:00

Bonalive - Optimizing the Use of Bonalive Bioactive Glass: Tips and Best Practices.

Laure Lacoste, International Channel Manager, Bonalive Ltd

Prof. Gerhard Schmidmaier

Chris Young and Guy Crosby, Neptune Medical, UK

16:10 - 16:45

Greenbone - From Rattan to bone guided regeneration: Clinical insights on b.bone.

Prof. P. Giannoudis

16:45 - 17:30

PBC Biomed- Strengthening the bond.

Prof. Peter Giannoudis MD, PhD, FACS, FRCS, MBE

Prof. Thomas Anthony Russell MD, FAAOS, FOTA, FIOTA.

Dr. Gerard Insley, PhD

17:45 - 19:30

Reception

SESSION II: Bone Repair: Stem Cells RevisitedModerators: **Prof. G. Richards, Prof. N. Lindfor**

08:30 - 08:42	Stem cell isolation for bone repair: Current approaches and delivery methods. <i>Prof. T. Blokhuis</i>
08:42 - 08:54	Stem cell treatment for non-union- latest evidence: Does it work? <i>Prof. I. Marzi</i>
08:54.- 09:06	Combining stem cells with growth factors and scaffolds: More effective? <i>Prof. T. Begue</i>
09:06 - 09:15	Discussion

SESSION III: Growth Factors: New Inductive Molecules - Better Than Before?Moderators: **Prof. G. Schmidmaier, Prof. Ingo Marzi**

09:15 - 09:27	BMP-2: Still valid for bone repair? <i>Mr. N. Kanakaris</i>
09:27 - 09:39	BMP-6: Is this the future for bone guided regeneration? <i>Prof. S. Vukicevic</i>
09:39 - 09:51	PRP: Recent evidence for bone repair <i>Prof. N. Lindfors</i>
09:51 - 10:03	Peptides: As good as anything? <i>Prof. T. Blokhuis</i>
10:03 - 10:15	Discussion
10:15 - 10:45	Spotlight Lecture 3

Strategies and innovations to manage bone infections: The AO Research Institute perspective.
Prof. G. Richards

10:45 - 11:00	Coffee Break
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SESSION IV: Scaffolds For Fracture HealingModerators: **Prof. S. Vukicevicj, Prof. Julian Jones**

11:00 - 11:12	RIA Graft: Still the best to use? <i>Mr. N. Kanakaris</i>
11:12 - 11:24	Allograft my preferred option: What I use and why? <i>Prof. T. Begue</i>
11:24 - 11:36	Synthetics is my choice: What I use and Why? <i>Prof. P. Giannoudis</i>
11:36 - 11:48	Novel biomaterials the future of scaffold treatment? <i>Dr. Dina Abdulaziz</i>
11:48 - 12:00	Discussion

12:00 - 12:20 **Spotlight lecture 4** - PBC - Biomaterials with Adhesive properties. *Prof. G. Insley*

SESSION V: MENISCUS LESIONS AND TREATMENT

Moderators: **Prof. H. Pandit, Mr. R. Bhattacharya**

12:20 - 12:35 Save the meniscus- strategies for repair. *Mr. R. Bhattacharya*

12:35 - 12:50 Meniscus replacements - current evidence. *Mr. A. Chandratreya*

12:50 - 13:05 Meniscus regeneration- future beckons? *Mr. V. Rajput*

13:05 - 13:15 Discussion

13:15 - 14:00 **Lunch**

SESSION VI: Free Papers Session 14:00-15:00

Moderators: **Prof. T. Bégué, Prof. A. Jha**

14:00 - 14:08 *J. Hofmann, T. Bewersdorf, U. Sommer, C. Schamberger, G. Schmidmaier, T. Grossner*

Is the whole more than its parts? Osteogenic potential of bone marrow mesenchymal stem cell and ABCB5 stem cell pure cultures in comparison with BM-MSC/ABCB5 MSC co-cultures.

14:08 - 14:16 *F. Pansera, A. Ballardini, G. Morozzi, A. Pasini, E. Giordano*

Ion Doping of Biomimetic Scaffolds for Bone Tissue Engineering.

14:16 - 14:24 *S. Agarwal, J. Redmond, S. Jaiswal, A. Tzagiollari, G. Insley, T. Levingstone, N. Dunne*

Preclinical evaluation of a phosphoserine-modified calcium phosphate cement for bone tissue engineering.

14:24 - 14:32 *N. Soehling, L. Leppik, A. Gempp, R. Frank, I. Marzi, D. Henrich*

A new perspective in bone tissue engineering: in vitro and in vivo effects of "off-the-shelf" MSC-coated beta-TCP-scaffolds.

- 14:32 - 14:40 *L.K. Shopperly, L.F.F. Moeckel, S. Schubring, F.B. Abboud, M. Wickert, B. Moebius, W. Ertel, L. Kuhrt, J. Spinnen*
Native Human Osseous Explant Cultures as a preclinical testing platform for the Biointegrative Capabilities of Biomaterials.
- 14:40 - 14:48 *J. Neijhoft, N. Soehling, A. Hahn, R. Verboket, I. Marzi, D. Henrich*
Printing on hADM - conceptualization and 3D printability study on human acellular dermis.
- 14:48 - 14:56 *E. Daskalakis, N. Iqbal, S. Loganathan, S. Kumar, E. Spettoli, G. Morozzi, A. Ballardini, P. Giannoudis, A. Jha*
Enhanced stell cell attachment, differentiation, and Angiogenesis of Laser drilled biomorphically engineered hydroxyapatite scaffolds.
- 14:56 - 15:00 Discussion
- 15:00 - 15:15 **Spotlight Lecture 5**
Nerve Regeneration: Latest advances. *Mrs. G. Bourke*
- SESSION VII: Ask the Expert Session**
- 15:15 - 16:00 Infected bone defects and the role of Bonalive bioactive glass. *Prof. G. Schmidmaier*
- 16:00 - 16:15 **Coffee Break**

SESSION VIII: Bone Infection-Latest InnovationsModerators: **Prof. M. Stoddart, Prof. T. Russell**

- 16:15 - 16:27 The role of coated nails to prevent infection and biofilm formation. *Mr. N. Kanakaris*
- 16:27 - 16:39 Scaffolds loaded with antibiotics: An update. *Prof. N. Lindfors*
- 16:39 - 16:51 Bioglass: Still the best? *Prof. J. Jones*
- 16:51 - 17:00 Discussion

SESSION IX: Free Paper SessionModerators: **Prof. G. Schmidmaier, Dr. G. Insley**

- 17:00 - 17:08 *Jacob Spinnen, Oleksandr Rikhter, Nazar Olendr, Michal Jagielski, Wolfgang Ertel, Judith Kikhney, Annette Moter, Lennard Shopperly, Leonard Kuhrt*
Challenges and opportunities in Dead Space Management of Septic Trauma with Bioactive Glass.
- 17:08 - 17:16 *A.J.L. Lodewijks, L.C.A. van der Broeck, M. van den Schoot, L. Cools, M. Poeze, T.J. Blokhuis*
The incidence of postoperative of long bone open fractures. Updated rates of amputation, infection, non-union and salvage procedures. A systematic review.
- 17:16 - 17:24 *H. Claireaux, H. Smith, A. Edwards, A. Ramasamy, J. Jones*
Bone defects and infection: a systematic review on bioactive glass use in orthopaedics.
- 17:24 - 17:32 *J. Neijhoft, W. Virefleau, C. Hoog-Antink, I. Marzi, D. Henrich.*
Development of a machine learning model for evaluating healing outcomes in critical-size bone defects.

17:32 - 17:40	<i>L.C.A. van der Broeck, D.G. Shchurov, A.C.L. Lodewijks, T.J. Blokhuis, S. Evers</i> The Economic Burden in terms of cost of illness and generic health-related quality of life of posttraumatic long bone non-unions among the adult population of the Netherlands from a societal perspective.
17:40 - 17:48	<i>S. Barreca, A. Piccolo, G. Calabrò, A. Morena, F. Scordino, M. Ventra, G. Lombardo, D. Lacquaniti</i> Pseudoarthrosis atypical fracture under hip prosthesis: osteosynthesis or revision?
17:48 - 17:56	<i>F. Chiodini, C. Garcia Parra, M. Migliore</i> Effectiveness of Bag S53P4 in Managing Critical Sized Bone Defects with the Masquelet Technique.
17:56 - 18:10	Discussion
18:10 - 19:00	ESTROT BOARD MEETING
20:15	<i>Social Dinner - Brasserie Blanc</i>

SESSION X: CARTILAGE REGENERATION***Prof. P. Giannoudis, Mr. S. Anand***

- 08:30 - 08:45 Injectables for knee chondral lesion- what is the evidence? *Mr. S. Anand*
- 08:45 - 09:00 Surgical Treatment options for Cartilage pathologies in the knee. *Mr. M. Hampton*
- 09:00 - 09:15 An alternative approach- distraction for knee degeneration. *Prof. H. Pandit*
- 09:15 - 09:30 Discussion

SESSION XI: Free Papers Session***Moderators: Prof. N. Maffulli, Mr. Nik Kanakaris***

- 09:30 - 09:38 *A. Ferrari, A. Ballardini, G. Morozzi, L. Cristofolini*
Development and Characterization of Innovative 3D Printed Scaffolds for Bone Regeneration.
- 09:38 - 09:46 *S. Barreca, A. Piccolo, G. Calabrò, A. Morena, F. Scordino, M. Ventra, G. Lombardo, D. Lacquaniti*
Traumatic Bone Loss in a Young Patient: our Experience.
- 09:46 - 09:54 *A.J.L. Lodewijks, M. Warin, L.C.A. van der Broeck, T.J. Blokhuis, M. van Griensven, M. Poeze*
Long-term follow up of patients with large segmental bone defects treated with 3D printed polycaprolactone/tricalcium phosphate.
- 09:54 - 10:02 *A. D'Arienzo, L. Andreani, S. Shytaj, F. Cosseddu, E. Ipponi, F.R. Campo, P.D. Parchi*
Bone marrow concentrate in the treatment of aneurysmal bone cysts: a case series study.

10:02 - 10:10	<i>Giannoudis VP, Rodham P, Kanakaris N, Giannoudis PV</i> Aseptic Femoral Fracture Non-Unions: Treatment Protocol and Outcomes.
10:10 - 10:18	<i>L. Andreani, E. Ipponi, M. Cordoni, A. De Blasi, E. Bechini, F. Gentili, A. D'Arienzo, P.D. Parchi</i> Digit-sparing surgery for hand bone tumors: the results of en-bloc bone resection and replacement with osteoarticular allografts.
10:18 - 10:26	<i>Rodham P, Juri A, Giannoudis V, Kanakaris N, Giannoudis PV</i> Clinical and radiological outcomes in diaphyseal and distal femoral defects managed with the induced membrane technique: Is there a difference?
10:26 - 10:34	<i>B. Samuel, V. Horbert, Z. Jin, D. S. Brauer, G. Matziolis</i> IMPACT OF BIOACTIVE GLASSES ON OSTEOBLAST CELL-LINE (SAOS-2) USING DIFFERENCE QUANTIFICATION TECHNIQUES: FLOW CYTOMETRY (FCM) AND FLUORESCENCE MICROSCOPY (FM).
10:34 - 10:42	<i>D.Henrich, M.Penna-Martinez, L. Klausner, R. Verboket, C. Nau, I.Marzi</i> Bone marrow mononuclear cells (BMC) reinforced one step membrane technique: Alterations of the membrane's secretome are dependent on time in defect and cell load.
10:42 - 10:47	Discussion
10:47 - 11:12	Spotlight Lecture 6 Mechanical Stimulation of Fracture Healing. <i>Prof. M. Stoddart</i>
11:12 - 11:30	Coffee Break
11:30 - 11:55	Spotlight Lecture 7 Management of Tendon Injuries: The past present and future. <i>Prof. N. Maffulli</i>

SESSION XII: Bone Defect Treatment: An Update

Moderators: **Prof. T. Bégué, Prof. T. Russell**

- 11:55 - 12:07 What have we learned from the animal models? *Prof. I. Marzi*
- 12:07 - 12:19 Diamond Concept for bone defect treatment: The best of all? *Prof. G. Schmidmaier*
- 12:19 - 12:31 What's new in bone transport? *Prof. H. Sharma*
- 12:31 - 12:43 Masquelet technique: Why is my preferred method? *Prof. P. Giannoudis*
- 12:43 - 12:55 Discussion
- 12:55 - 13:20 **Spotlight Lecture 8**
The past present and future of bone augmentation. Prof. T. Russell
- 13:20 - 14:05 Lunch
- 14:05 - 14:25 **Spotlight Lecture 9**
Bone Necrosis: An Update. Prof. P. Giannoudis

SESSION XIII Awards Ceremony

- 14:25 - 14:50 **Awards - Closure**

REGISTRATION FEES

REGISTRATION FEES (VAT included)	UNTIL 30/03/2025	FROM 31/03/2025	AWARDS	
Medical Doctors Member*	200,00 €	250,00 €	Free papers	
Medical Doctors Non Member*	350,00 €	€ 400,00 Joining ESTROT membership (fee € 50,00) will imply 8th ESTROT Members Registration fee € 250,00	Gold	€ 1.000,00
			Silver	€ 500,00
			Bronze	€ 250,00
			Poster	€ 250,00
Scientist, Residents and Researchers	75,00 €	100,00 €		
Students and Nurses	50,00 €	75,00 €		
Exhibitors	150,00 €	200,00 €		
One day registration Member*	100,00 €	150,00 €		
One day registration Non Member*	150,00 €	200,00 €		
Social Reception 30 May	free	free		
Dinner 31 May – Brasserieblanc	70,00 €	70,00 €		

The registrations will be accepted in a chronological order and must have the copy of payment

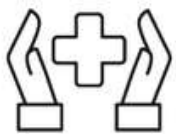
Cancellation policy: registration fees are non refundable

*UOL Leeds Staff: special price in registration page on website www.keepinternational.net



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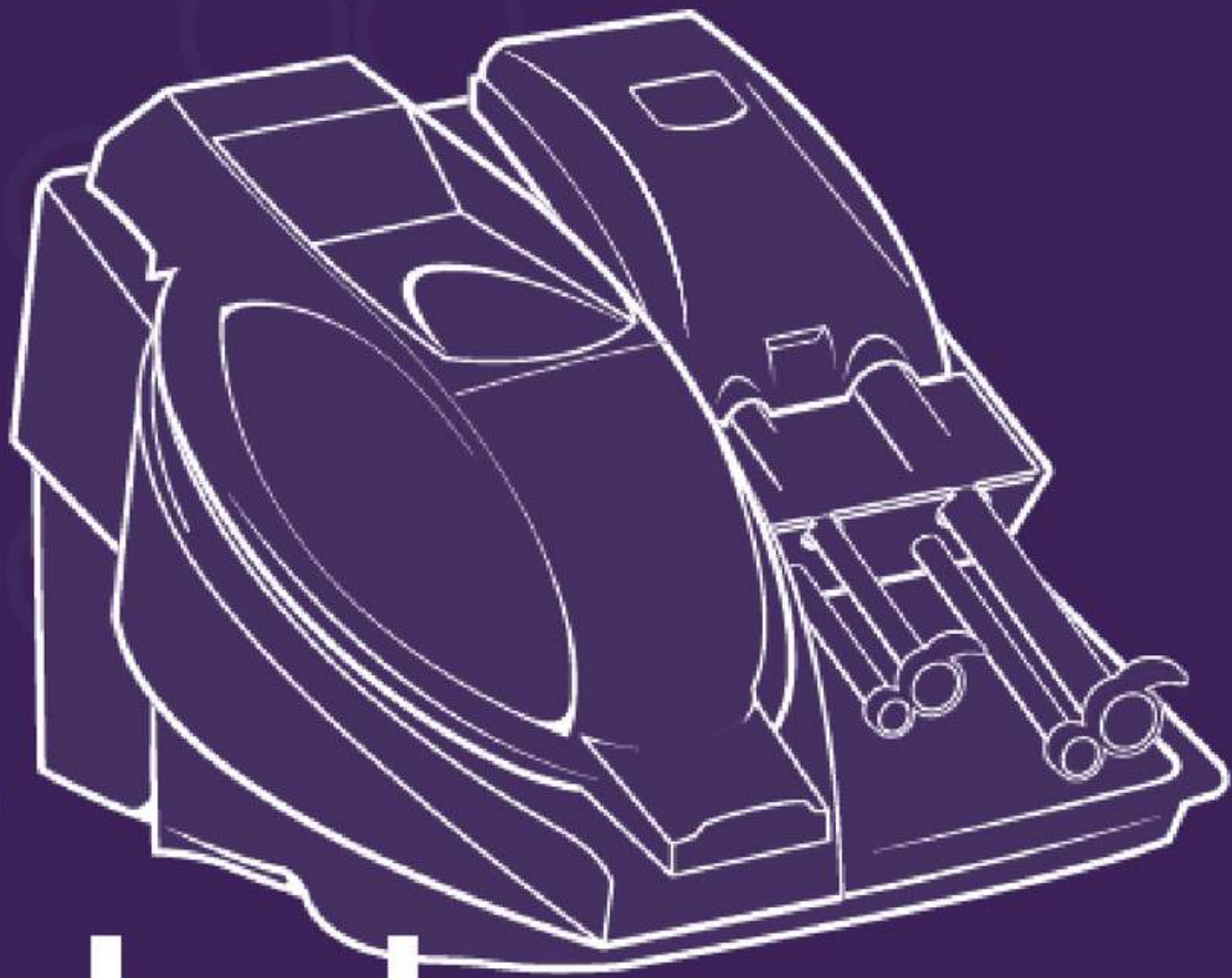
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