



8TH ESTROT CONGRESS

European Society of Tissue Regeneration in Orthopaedics and Traumatology



Nina Lindfors
Chairman

THE MAIN TOPICS:

- Biomaterials – tissue regeneration, infection treatment
- Bone and cartilage – tissue reconstruction and regeneration
- Traumatology – surgical techniques, host reactions
- Plastic surgery – soft tissue regeneration
- Tissue regeneration in children



10-12 June 2024



Helsinki, Finland



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European Society of Tissue Regeneration in Orthopaedics and Traumatology

E.S.T.R.O.T.

BOARD

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Leeds, United Kingdom

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Paris, France

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Scientific Committee Chair
Prof. Giorgio M. Calori
Milan, Italy

OBJECTIVES

The objectives of the Society are:

To relieve sickness in particular by advancing and promoting education and research in the treatment of musculoskeletal disorders.

To cover all matters relating to the progress and development of the field of tissue regeneration including surgery of bone, cartilage, muscle, nerve, skin, imaging techniques, rehabilitation and other related medical specialities.

To disseminate the useful results of tissue regeneration research into the medical profession.

To promote audit of hard and soft tissue reconstruction in relation to patient outcomes.

To guide European Tissue Regeneration Policies and to guide alliances of similar organisations from other continents.

Helsinki – the cool and sustainable capital by the Baltic Sea

Helsinki is a charming seaside city with a unique twist. Located on the shore of the Gulf of Finland, Helsinki is a place where urban culture meets coastal nature. The easy-going Nordic lifestyle and friendly locals make it easy to fall in love with this northern city – the capital of the happiest country in the world!



FACULTY

Anttila Turkka - Helsinki, Finland
Arts Chris - Maastricht, The Netherlands
Asklof Tom - Helsinki, Finland
Aspinen Samuli - Helsinki, Finland
Begu  Thierry - Paris, France
Bjorkenheim Robert - Helsinki, Finland
Blokhus Taco - Maastricht, The Netherlands
Calori Giorgio Maria - Milan, Italy
Emans Pieter - Maastricht, The Netherlands
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Helenius Illka - Helsinki, Finland
Hettiaratchy Shehan - London, United Kingdom
Ibounig Thomas - Helsinki, Finland
Jones Julian - London, United Kingdom
Kalske Joonas - Helsinki, Finland
Kauhanen Susanna - Helsinki, Finland
Kilijunen Saija - Helsinki, Finland

Kold Soren - Aalborg, Denmark
Lindfors Nina - Helsinki, Finland
Lindahl Jan - Helsinki, Finland
Marzi Ingo - Frankfurt, Germany
Mattila Simo - Helsinki, Finland
Mesimaki Karri - Helsinki, Finland
Mora Leon - Medellin, Colombia
Nietosvaara Yrjana - Helsinki, Finland
Nikitin Petro - Kyiv, Ukraine
Nordback Panu - Helsinki, Finland
Rikhter Oleksandr Kyiv, Ukraine
Ryhanen Jorma - Helsinki, Finland
Salo Jari - Helsinki, Finland
Schmidmaier Gerhard - Heidelberg, Germany
Simons Tomi - Helsinki, Finland
Suominen Sinikka - Helsinki, Finland
Vallittu Pekka - Turku, Finland
Villain Benoit - Paris, France
Vuola Jyrki - Helsinki, Finland
Welting Tim - Maastricht, The Netherlands
Ylitalo Antti - Tampere, Finland

09:00 Registration

10:25 Welcome opening – *Nina Lindfors*

Session I – Cartilage regeneration and osteoarthritis

Chairmen: *Nina Lindfors, Peter Giannoudis*

10:30 Meniscal allograft transplantation outcomes in both minimal and moderate knee osteoarthritis
Jan Lindahl

10:50 Cartilage repair and joint-preservation – *Pieter Emans*

11:10 Role of subchondral bone in joint cartilage regeneration – *Jari Salo*

11:30 Peptide-based molecular interventions for osteoarthritis – *Tim Welting*

11:50 Free vascularized fascia for the treatment of trapeziometacarpal osteoarthritis – *Simo Mattila*

Session II – Complications and treatment protocols

Chairmen: *Jan Lindahl, Gerhard Schmidmaier*

12:10 Complications using externally controlled intramedullary nails for limb lengthening or bone transport
Sören Kold

12:30 Reducing complications – Protocol based orthoplastic approach to open tibia fractures – *Antti Ylitalo*

12:50 Lunch Break – the stairs in the Bridge Hospital

13.20 Poster Session

Session III – Soft tissue treatment and tissue regeneration: plastic and hand surgery

Chairmen: *Jyrki Vuola, Thierry Bégué*

- 14:00 Adipose tissue derived stromal cells – Clinical Applications – *Susanna Kauhanen*
- 14:20 Helsinki approach in the surgical management of lymphedema – *Sinikka Suominen*
- 14.40 Cell therapy for wound healing in burn patients – *Jyrki Vuola*
- 15.00 Skin substitutes title to be confirmed – *John Gästgifvars*
- 15.20 Novel algorithmic approach for hand soft tissue reconstruction – *Panu Nordback*

- 15:40 Coffee Break

Session IV – New technologies: Artificial Intelligence and 3D printing

Chairmen: *Chris Arts, Nina Lindfors*

- 16:00 Detection of DRF with AI from plain radiographs – *Turkka Anttila*
- 16:20 Detection of hand Enchondromas using AI – *Jorma Ryhänen*
- 16:40 Using 3D printed patient specific b-TCP synthetic bone graft in distal radius osteotomies – *Samuli Aspinen*
- 17:00 Development and Characterization of a 3D printable filament containing Vancomycin for local antimicrobial and prophylactic applications – *Jonas Neijhoft*
- 17.20 Summary

- 18.00 Welcome reception Finska Läkaresällskapet garden and Annex

07:30 ESTROT Board meeting

Session V – Musculoskeletal tissue regeneration in children

Chairmen: *Ilkka Helenius, Taco J. Blokhuis*

08:30 Distraction osteogenesis in limb deformities – *Mikko Haara*

08:50 Bioactive glass for benign pediatric bone lesions – *Ilkka Helenius*

09:10 Nerve transfer and grafting for Brachial plexus birth injuries – *Yrjänä Nietosvaara KYS*

09:30 Coffee Break

Session VI – Innovative methods and techniques for treatment of bone

Chairmen: *Gerhard Schmidmaier, Ingo Marzi*

09:45 Bone scopy – *Leon Mora*

10:05 Innovative techniques for the treatment of bone defects in maxillofacial surgery – *Karri Mesimäki*

10:25 Implant induced ossification in cranial reconstructions – *Pekka Vallittu*

Session VII – War trauma and treatment methods

Chairmen: *Joonas Kalske, Peter Giannoudis*

10:45 War trauma and bone substitutes in Ukraine – *Oleksandr Rikhter*

11:05 Large combat bone defect. Our experience of treatment – *Petro Nikitin*

11:25 Experience in war trauma – *Jan Geurts*

11:45 Break

12:05 **Lunch Symposium**

Strategies to contain the Bioglass in the cavities and avoid its dilution and diffusion in the soft tissues. How to do it well - *Leon Mora*

Session VIII – Basic science and Tissue Regeneration

Chairmen: *Julian Jones, Nina Lindfors*

12:30 Phage therapy in orthopedic infections - *Saija Kiljunen*

12:50 Co-culture strategies to study the mechanisms of tissue regeneration - *Terhi Heino*

13:10 Supporting guided regeneration and controlling inflammation in order to replace bone defects clinically via tissue engineering - *Ingo Marzi*

Session IX – Treatment methods of bone tissue I

Chairmen: *Taco J. Blokhuis, Giorgio M. Calori*

13:40 Algorithm of treatment of non union and critical size bone defects, based on the innovative Nuss Classification - *Giorgio M. Calori*

14:00 FOCA bone transport in humerus - *Thomas Ibounig*

14:20 Polytherapy for posttraumatic long bone non-unions - *Taco Blokhuis*

14:40 Bioactive glass S53P4 in the treatment of infected bone - *Joona Kalske*

15:00 The Art of Bone Void Filling: Issues, Challenges, Solutions - *Peter Giannoudis*

15.20 Coffee Break

15:30

Free Paper Session

Chairmen: *Chris Arts, Nina Lindfors*

Session X - Treatment methods of bone tissue II

Chairmen: *Simons, Peter Giannoudis*

17:05

"Treatment options of segmental bone defect with Bioglass S53P4 – what is the evidence?"

Gerhard Schmidmaier

17.25

Single stage treatment of small-medium sized bone defects using S53P4 bioactive glass

Robert Björkenheim

17:45

Long-term results of using bioactive glass S53P4 in the spine - *Tom Asklof*

Session XI - Bone defects and bone grafts

Chairmen: *Gerhard Schmidmaier, Thierry Bégué*

- 08:30 Reconstruction of severe segmental bone defects in the lower limb by structural allograft in addition to the Masquelet technique - *Benoit Villain*
- 08:50 Limits of the Masquelet technique with or without bioactive glass S53P4 - *Thierry Bégué*
- 09:10 Bouncy bioglass for large bone defect regeneration - *Julian Jones*
- 09:30 Management of infected failed arthroplasty in adults over 70 years of age, comprehensive management in a single step with bioactive glass as part of the total strategy - *Leon Mora*

09:50 **Award Ceremony**

10:10 Coffee Break

Session XII - Future challenges and the way forward

Chairmen: *Peter Giannoudis, Nina Lindfors*

- 10:30 Material technology to curb AMR; the DARTBAC project - *Chris Arts*
- 10:50 Bioactive glass S53P4 what have we achieved in 30 years and what next? - *Nina Lindfors*
- 11:10 Segmental defect reconstruction an opening for a multicenter study? / Discussion - *Gerhard Schmidmaier*
- 11:50 Closure

REGISTRATION FEES AND AWARDS

| REGISTRATION FEES (VAT included) | UNTIL 09/05/2024 | FROM 10/05/2024 |
|---|---------------------|--|
| Medical Doctors Member | 200,00 € | 250,00 € |
| Medical Doctors Non Member | 350,00 € | € 400,00 Joining ESTROT membership (fee € 50,00) will imply 8th ESTROT Members Registration fee € 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 10 June | 80,00 € | 80,00 € |

| AWARDS | |
|-------------|------------|
| Free papers | |
| Gold | € 1.000,00 |
| Silver | € 500,00 |
| Bronze | € 250,00 |
| Poster | € 250,00 |

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

Cancellation policy: registration fees are non refundable

GENERAL INFORMATION

LOCATION

MEILAHTI BRIDGE HOSPITAL

Haartmaninkatu 4

Helsinki

Finland

REGISTRATION



ORGANIZATIONAL BUREAU

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INTERNATIONAL • 1992

HEADQUARTERS

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