



DRUŠTVO ZA CELIČNO
IN TKIVNO INŽENIRSTVO
SLOVENIJE



CELL AND TISSUE
ENGINEERING SOCIETY
OF SLOVENIA

IPLASS and CTESS Joint International Conference:

New Horizons in Cell and Tissue Engineering and Perinatal Derivatives

Program

September 19-20, 2024
Izola, Slovenia

Editors: Mateja Erdani Kreft, Samo Hudoklin

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<https://www.iplassociety.org/>



Cell and Tissue Engineering Society of Slovenia (CTESS) /
Društvo za celično in tkivno inženirstvo Slovenije

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Venue

Belvedere Resort, Dobrava 1a, 6310 Izola, Slovenia

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General information - Slovenia



<https://www.slovenia.info/en>



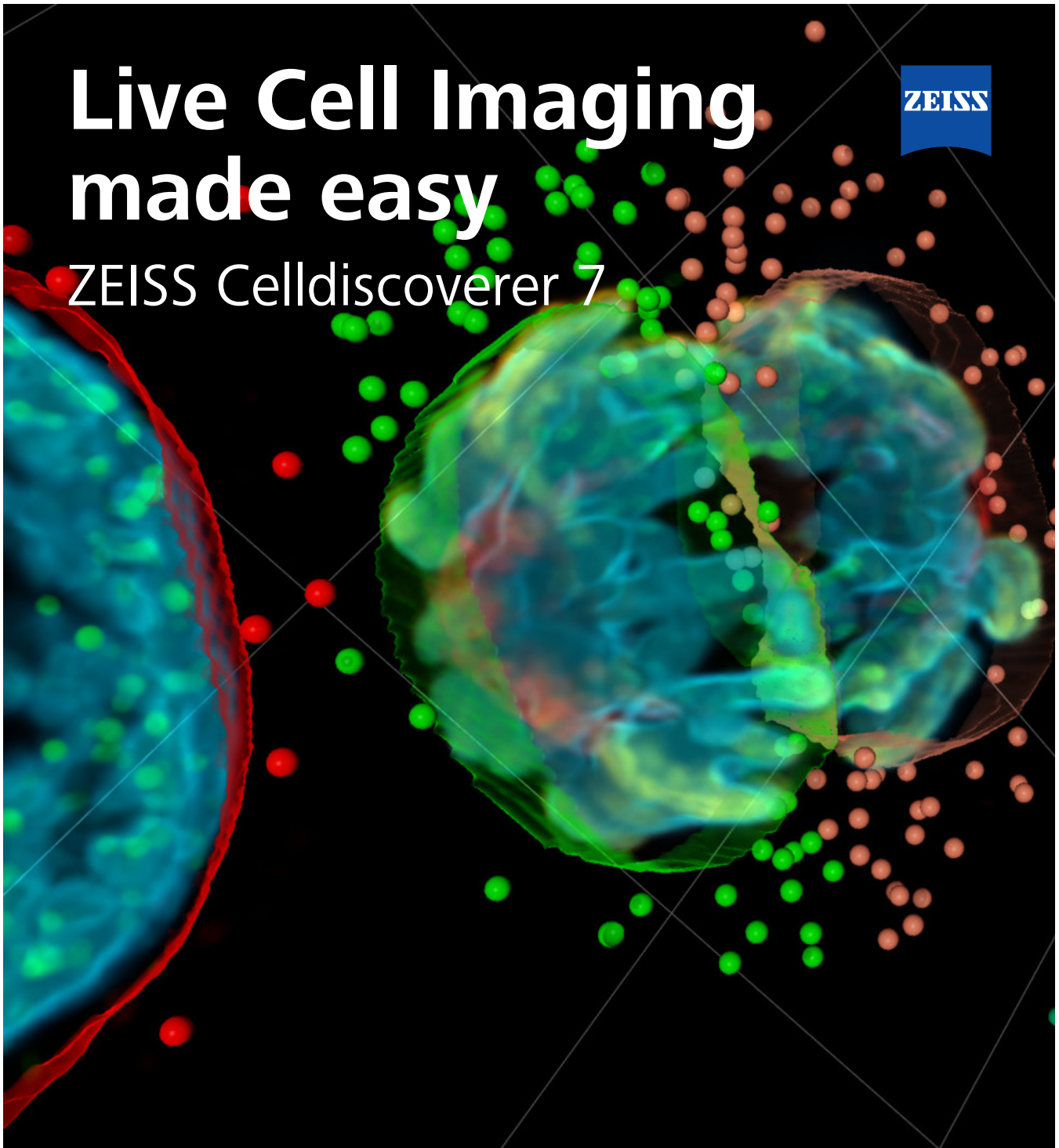
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THURSDAY, September 19, 2024

- 8:00-8:50 Registration and poster set-up
- 8:50-9:00 **OFFICIAL WELCOME AND OPENING** from
Congress President (Mateja Erdani Kreft)
President of the International Placenta Stem Cell Society (Antonietta Silini)
President of Cell and Tissue Engineering Society of Slovenia (Matej Drobnič)
- SESSION 1: Elucidating the mechanisms of action of perinatal derivatives**
Chairs: *Fabio Marongiu, Sveva Bollini*
- 9:00-9:25 **Roberto Gramignoli** (Italy) – Immune regulatory and modulatory effects offered by intact hAEC and soluble mediators
- 9:25-9:50 **Mateja Erdani Kreft** (Slovenia) – Mechanisms of action of hAM in addressing cystitis and bladder cancer
- 9:50-10:15 **Francisco J. Nicolas** (Spain) – Assessing the contribution of the different populations of AM-cells to the AM wound-healing beneficial effect
- 10:15-10:45 **Coffee break and poster viewing**
- SESSION 2: Biomolecules and tissue engineering**
Chairs: *Nataša Resnik, Florelle Gindraux*
- 10:45-11:00 **Nefertiti Chaves-Solano** (Austria) – Pro-regenerative miRNA from human amniotic membrane as a potential source for tissue regeneration
- 11:00-11:15 **Valeria Pizzuti** (Italy) – Combining Urine Derived Renal Epithelial Cells and Wharton's Jelly Mesenchymal Stem Cells into a spheroid: structural insights and immunomodulatory properties
- 11:15-11:30 **Hristina Obradović** (Serbia) – Harnessing the potential of amniotic membrane homogenate: a novel bioink for 3D bioprinting in breast reconstruction
- 11:30-11:45 **Alice Masserdotti** (Italy) – Engineering a biodigital placenta for advanced drug testing
- KEYNOTE LECTURE**
Chairs: *Fabio Marongiu, Sveva Bollini*
- 11:45-12:25 **Toshio Miki** (Japan) – Unlocking the Potential of Amniotic Epithelial Cells: Past Achievements and Future Prospects
- 12:30-13:30 **Lunch**

THURSDAY, September 19, 2024

SESSION 3: New therapeutic applications of perinatal derivatives

Chairs: *Francisco J. Nicolás, Andreina Schoeberlein*

- 13:30-13:55 **Michela Pozzobon** (Italy) – Muscle regeneration in translational research
- 13:55-14:20 **Panagiotis Mallis** (Greece) – Deciphering the immunoregulatory role of MSCs and their potential application in inflammatory diseases
- 14:20-14:45 **Fabio Marongiu** (Italy) – Investigating the Potential Application of the Amniotic Membrane and Amniotic Epithelial Cells in Ophthalmology: a focus on Retinal Regeneration
- 14:45-15:10 **Jessica Schiavi-Tritz** (France) – Bioproduction of secretome by Wharton Jelly Mesenchymal Stromal Cells – a mechanobiological approach
- 15:10-15:40 **Coffee break and poster viewing**

SESSION 4: New ideas and innovative PhD projects

Chairs: *Roberto Gramignoli, Janja Zupan*

- 15:40-15:55 **Vlasta Hadalin** (Slovenia, Germany) – Towards exploring the role of RPGR isoforms for retinitis pigmentosa and cone/cone-rod dystrophy in human retinal organoid
- 15:55-16:10 **Silvia Alcaez Romero** (Spain) – Amniotic membrane therapeutical effect in wound healing is preserved 48 hours after thawing
- 16:10-16:25 **Laura Guerricchio** (Italy) – Extracellular vesicles from second trimester human amniotic fluid as novel therapeutics for skeletal and cardiac muscle injury
- 16:25-16:40 **Martina Della Lastra** (Italy) – Human amnion epithelial secretome may drive the generation of NK cells with lower proliferative capability and higher effector functions
- 16:40-16:55 **Enzo Calarco** (Italy, Sweden) – Intact cells or secretome in support of immune system re-education, tissue regeneration, or oncological treatment?
- 17:30- **Social Event**
Bus leaving congress venue for a boat-trip with congress dinner.

FRIDAY, September 20, 2024

8:00-8:30 **Registration and poster viewing**

SESSION 5: Moving Cell and Tissue Engineering into the Clinic

Chairs: *Susanne Wolbank, Ivana Okić-Djordjević*

8:30-8:55 **Florelle Gindraux** (France) – Successful use of hAM in oral surgery and ophthalmology - role of its immunogenicity

8:55-9:20 **Roman Jerala** (Slovenia) – Synthetic biology for engineering signaling pathways for therapeutic applications

9:20-9:45 **Helena H. Chowdhury** (Slovenia) – Personalized dendritic cell-based immunohybridoma vaccines to treat solid cancers

9:45-10:10 **Ana Flores** (Spain) – Role of perinatal mesenchymal mesenchymal stromal cells of the decidua in the repair of pelvic floor tissue damage

10:10-10:35 **Džihan Abazović** and **Dušan Marić** (Serbia) – Advanced Strategies in Cell Therapy for Cartilage Repair: Innovations and Clinical Applications

10:35-11:00 **Coffee break and poster viewing**

SESSION 6: Therapeutic Strategies of Cell and Tissue Engineering

Chairs: *Nevenka Kregar Velikonja, Tomaž Smrkolj*

11:00-11:25 **Sveva Bolini** (Italy) – Amniotic fluid derivatives for cardiac repair: hype or hope?

11:25-11:50 **Matej Drobnič** (Slovenia) – Restoration of articular cartilage by using the tissue engineering procedures

11:50-12:15 **Raquel Cabrera-Pérez** (Spain) – Use of Wharton's jelly mesenchymal stromal cells and extracellular vesicles in innovative therapies

12:15-12:40 **Ivana Okić-Djordjević** (Serbia) – Developing mucoadhesive films with hAM homogenate for application in oral wound healing

12:50-13:30 **IPLASS ASSEMBLY**

13:30-14:30 **Lunch**

ROUND TABLE – Past, present and future of regenerative medicine

Chairs: *Antonietta R Silini, Matej Drobnič*

14:30-15:30 **Ornella Parolini, Susanne Wolbank, Mio Knežević, Damjan Radosavljević, Primož Rožman, Matjaž Jeras**

KEYNOTE LECTURE

Chairs: *Mateja Erdani Kreft, Roberto Gramignoli*

15:30-16:10 **Naomi McGovern** (United Kingdom) – Placental macrophages - their ontogeny and function

16:15-16:45 **AWARDS CEREMONY and MEETING CLOSURE**

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Dear Colleagues,

On behalf of the International Placenta Stem Cell Society (IPLASS) and the Cell and Tissue Engineering Society of Slovenia (CTESS), we are delighted to extend a warm welcome to all participants attending the upcoming international congress in Izola, Slovenia.

We look forward to bringing together global experts in the fields of placenta research, stem cell research, cell therapy and tissue engineering. This meeting promises to be an enriching experience, providing a platform for the exchange of knowledge, ideas and innovations that will shape the future of regenerative medicine.

Our collective efforts aim to foster collaboration among academic researchers, clinicians, and industry professionals, facilitate interdisciplinary discussions and drive advances that will lead to breakthroughs in healthcare. Together we will explore the latest developments, share best practises and forge partnerships across borders and disciplines.

We look forward to our shared journey towards a future of wellbeing through science and collaboration.

With Cordial Regards,

Mateja Erdani Kreft, Congress President

Antonietta R. Silini, IPLASS President

Matej Drobnič, CTESS President



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 1. Arthrex, Inc. Data on file (APT-5368), Naples, FL, 2021.
 2. Arthrex, Inc. Data on file (APT-5535), Naples, FL, 2022.
 3. Arthrex, Inc. Data on file (APT-5756), Naples, FL, 2022.

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