Tissue Engineering and Regenerative Medicine International Society (TERMIS) European Chapter Conference 2022

Tuesday, 28 June 2022

Opening Session - Room: S1 (28 Jun 2022, 09:00 - 10:30)

time	title	presenter
09:00	Welcome speeches (30 minutes)	
09:30	Performance Art (15 minutes)	
09:45	The evolution of reconstructive surgery – team experience of Department od Oncological and Reconstructive Surgery National Research Institute of Oncology	MACIEJEWSKI, Adam

Coffee break & poster (10:30 - 11:00)

S01 3D in vitro tissue-engineered cancer/disease models – Session I - Room: S1 (28 Jun 2022, 11:00 - 12:30)

-Conveners: Anna-Dimitra Kataki; Silvia Farè

time	title	presenter
11:00	Bioengineered platform to study immune-cancer cell interactions ex vivo	VARGHESE, Shyni
11:20	Modelling breast-to-bone metastatic mechanisms via microfluidic biofabrication	CIDONIO, Gianluca
11:30	Induction of branching morphogenesis in cholangiocarcinoma organoids in vitro improves similarity with the original tumor for enhanced personalized medicine applications	VAN TIENDEREN, Gilles
11:40	A TUMOUR MICROENVIRONMENT MODEL FOR PANCREATIC CANCER	KAST, Verena
11:50	An In vitro Vascularised Liver Organotypic Model for the Testing of Nanomedicines	SANTIN, Matteo
12:00	A Systematic Comparative Assessment of the Response of Ovarian Cancer Cells to Cisplatin in 3D Models of Various Structural and Biochemical Configurations	KATAKI, Anna-Dimitra
12:10	HARNESSING PREDICTIVE TOXICOLOGY WITH A MINIATURIZED MODULAR GASTROINTESTINAL PLATFORM	NETO, Mafalda D.
12:20	Collagen-nanocellulose forms a matrix of controllable stiffness to mimic the pancreatic tumour microenvironment	CURVELLO, Rodrigo

S49 Novel strategies to assess cellular response to biomaterials - Room: S3 B (28 Jun 2022, 11:00 - 12:30)

-Conveners: Carmelo De Maria; Julieta I. Paez

time	title	presenter
11:00	Quantum Sensing for measuring free radical generation in living cells	SCHIRHAGL, Romana
11:20	A NEW SEMI-ORTHOTOPIC BONE DEFECT MODEL FOR CELL AND BIOMATERIAL TESTING IN REGENERATIVE MEDICINE	FARRELL, Eric
11:30	Mechanotransduction and reshaping at the nuclear envelope: investigating the Lamin A/C-SUN1 interaction	DONNALOJA, Francesca

11:40	IMMUNE PERFUSION IN CUSTOM BIOREACTORS FOR THE STUDY OF THE EXTRACELLULAR MATRIX-IMMUNE CELL CROSSTALK IN LIVER FIBROSIS	URBANI, Luca
11:50	GRAPHENE OXIDE PROMOTES EPITHELIAL MESENCHYMAL TRANSITION IN OVINE AMNIOTIC EPITHELIAL STEM CELLS AFFECTING THEIR IMMUNOMODULATORY PROPERTIES	CITERONI, Maria Rita
12:00	PARTICLE SIZE IN FREE-PACKED GRANULAR SYSTEMS INFLUENCE CELL RESPONSE	CUNHA, Ana F.
12:10	ELECTROACTIVE MATERIALS GOVERN CELL BEHAVIOR THROUGH THEIR EFFECT ON PROTEIN DEPOSITION	MARTIN-IGLESIAS, Sara
12:20	EVALUATION OF TISSUE INTEGRATION AND ANGIOGENESIS OF 3D PRINTED POROUS SCAFFOLDS USING A NON-DESTRUCTIVE MICROCT APPROACH	DIAZ-GOMEZ, Luis

S07-1 Advances in cardiac tissue engineering: in vitro platforms and in vivo regeneration - Room: S3 A (28 Jun 2022, 11:00 - 12:30)

-Conveners: Valeria Chiono; Michael Monaghan

time	title	presenter
11:00	Lessons learned on how (not to) build a heart	PASQUALINI, Francesco
11:20	MECHANICAL AND TOPOLOGICAL CUES TO ENHANCE DE NOVO EXTRACELLULAR MATRIX ELABORATION IN ELASTOMERIC SCAFFOLD MODELS.	D'AMORE, Antonio
11:40	Convergency of dual extrusion bioprinting and melt electrowriting allows for vascularized cardiac patch fabrication	AINSWORTH, Madison J.
11:50	Allogeneic stem cells and immunomodulatory biomaterials for cardiac tissue engineering	DHINGRA, Sanjiv
12:00	A Micro-Precision Electro Array (µPEA) platform integrated within a mechanically active heart-on-chip for modelling Dilated Cardiomyopathy	LOZANO-JUAN, Ferran
12:10	CARDIAC TISSUE-LIKE 3D MICROENVIRONMENT ENHANCES THE DIRECT REPROGRAMMING PATH OF HUMAN FIBROBLASTS INTO INDUCED CARDIOMYOCYTES BY MICRORNAS	PAOLETTI, Camilla
12:20	TISSUE ENGINEERED CARDIAC PATCHES FOR THE TREATMENT OF POST-MI HEART FAILURE USING NATURAL POLYMERS AND HUMAN IPSC-DERIVED CELLS	FRICKER, Annabelle

S08 Antimicrobial biomaterials for bone regeneration - Room: S4 A (28 Jun 2022, 11:00 - 12:30)

-Conveners: Fergal O'Brien; Joanna Sadowska

time	title	presenter
11:00	Bioactive glass based approaches for antibacterial bone regeneration	BOCCACCINI, Aldo
11:20	POLYHYDROXYALKANOATE/BIOACTIVE GLASS COMPOSITE SCAFFOLDS WITH ANTIMICROBIAL PROPERTIES FOR BONE TISSUE ENGINEERING APPLICATIONS	MELE, Andrea
11:30	Alpha Tocopherol, Alpha-tocopheryl Posphate and GN-2-Npm9, molecules for the modification of chemically treated Ti6Al4V alloy surfaces for antibacterial and anti-inflammatory purposes.	GAMNA, Francesca
11:40	BIOACTIVE GLASSES WITH ANTIBACTERIAL PROPERTIES FOR BONE TISSUE REGENERATION	ARANGO-OSPINA, Marcela

11:50	Drop on demand: A new method to develop antimicrobial coatings on medical implants	MARTINEZ PEREZ, David
12:00	DEVELOPMENT OF MULTIFUNCTIONAL HYALURONIC ACID HYDROGELS WITH ANTIBACTERIAL, ANTI-INFLAMMATORY AND NUCLEIC ACID DELIVERY PROPERTIES	GRIBOVA, Varvara
12:10	Effect of gallium doped hydroxyapatite on P. aeruginosa bacteria growth	MOSINA, Marika
12:20	3D PRINTED SCAFFOLDS WITH NON-ANTIBIOTIC ANTIMICROBIAL-DOPED HYDROXYAPATITE FOR INHIBITING S. AUREUS GROWTH IN VITRO AND SUPPORTING BONE REGENERATION IN VIVO	GENOUD, Katelyn

S13-1 Biofunctionalized surfaces for cellular and tissue engineering - Room: S2 (28 Jun 2022, 11:00 - 12:30)

-Conveners: Rui L. Reis

time	title	presenter
11:00	BIOMIMETIC SURFACE COATINGS AND HYDROGELS FOR TISSUE ENGINEERING APPLICATIONS	GROTH, Thomas
11:20	Surface Functionalised Biomaterials and Nanostructures for Advanced Therapies	NEVES, Nuno
11:40	INTRODUCING CONTINUOUS MATERIAL GRADIENTS IN OSTEOCHONDRAL CONSTRUCTS VIA A NOVEL EXTRUSION-BASED 3D PRINT HEAD	BEEREN, Ivo
11:50	High-content image-based profiling for evaluating the effect of peptide coating effect on medical devices	SUGIYAMA, Ayato
12:00	bFGF-functionalized polyisocyanopeptide hydrogel for tissue regeneration of the pelvic floor	VAN VELTHOVEN, M.J.J.
12:10	Developing brain-targeting liposomes to deliver mesenchymal stem cells secretome for Parkinson's Disease Regenerative Medicine	BARATA-ANTUNES, Sandra
12:20	Guided cartilage formation: covalent growth factor immobilization on melt electrowritten microfiber scaffolds	AINSWORTH, Madison J.

Lunch break (12:30 - 13:30)

S02 3D in vitro tissue-engineered cancer/disease models – Session II - Room: S1 (28 Jun 2022, 13:30 - 15:00)

-Conveners: Serena Danti; Rui L. Reis

time	title	presenter
13:30	Mimicking the tumor stroma-induced vasculature collapse in 3D pancreatic tumor model	PRAKASH, Jai
13:50	BOTTOMS-UP BIO-PRINTING OF CELLULARIZED POROUS MICRO-SCAFFOLDS TO ENHANCE CELL PROLIFERATION, VIABILITY AND MIGRATION	ROUSSELLE, Adrien
14:00	Post-printing structure formation in bioprinted tissue constructs that mimic the tumor microenvironment	NEAGU, Adrian
14:10	Bioreactor dynamic organotypic culture of primary liver cancer as a personalised immunocompetent drug screening platform for immuno-oncology	URBANI, Luca
14:20	Development of a bioprinted breast cancer model using decellularized mammary glands	BLANCO-FERNANDEZ, Barbara
14:30	INVESTIGATION OF BREAST CANCER EPITHELIAL-MESENCHYMAL TRANSITION USING 3D COLLAGEN-BASED MODELS	SAINSBURY, Elizabeth

14:40	ENGINEERING BIOMIMETIC HUMAN LUNG TUMOR MODELS	OZTURK, Ece
14:50	THE BIOMECHANICAL SIGNATURES OF 3D IN VITRO TUMOUR MODELS	MICALET, Auxtine

S09 Biobanking - indispensable support for the development of regenerative medicine - Room: S4 B (28 Jun 2022, 13:30 - 15:00)

-Conveners: Anna Chróścicka; Maria Chatzinikolaidou; Gilles Van Tienderen

time	title	presenter
13:30	Can biofabrication technologies help to facilitate biobanking of tissue engineered products?	MORONI, Lorenzo
13:50	TISSUE ENGINEERING AND BIOBANKING - A POSSIBLE FORCE-JOINING ALLIANCE IN APPLIED SCIENCES	LEWANDOWSKA-SZUMIEL, Malgorzata
14:10	Are there any differences between biobanking and banking of tissues and cells for clinical use?	KAMIŃSKI, Artur
14:20	Bone-forming capacity and immunogenicity of engineered and decellularized human cartilage grafts	PRITHIVIRAJ, Sujeethkumar
14:30	LIPID-POLYMER NANOCARRIERS FOR CARTILAGE REGENERATION	WYTRWAL-SARNA, Magdalena
14:50	CRYOPRESERVED ADIPOSE TISSUE-DERIVED STROMAL VASCULAR FRACTION FOR THE GROWTH FACTOR-FREE VASCULARIZATION OF BLUE SHARK COLLAGEN SPONGES	FREITAS RIBEIRO, Sara

S19 Biomimetic Approaches to Cardiovascular Regeneration: how and why? - Room: S4 A (28 Jun 2022, 13:30 - 15:00)

-Conveners: Petra Mela; Elena De-Juan-Pardo; Julia Marzi

time	title	presenter
13:30	Biomimetic approaches to heart valve engineering: ready to tell you how and at work to tell why.	D'AMORE, Antonio
13:50	MELT ELECTROWRITING FOR TUNING THE PROPERTIES OF IMPLANT SURFACES	BURKHARDT, Sarah
14:00	MELT-ELECTROWRITTEN HIGHLY TUNABLE ANISOTROPIC SCAFFOLDS FOR CARDIOVASCULAR TISSUE ENGINEERING	MUELLER, Kilian
14:10	Layered vascular grafts - mechanical properties and hemocompatibility	ŁOPIANIAK, Iwona
14:20	MESO-SCALE PATTERNED COLLECTING TARGET TO INDUCE LOCAL ANISOTROPY AND CURVILINEAR FIBER ORIENTATION IN ELECTRO-DEPOSITED, MICRO-FIBER BASED MITRAL VALVE SCAFFOLDS	TERRANOVA, Pietro
14:30	DEVELOPMENT OF A BIO-INSPIRED SCAFFOLD FOR SMALL Ø VASCULAR REGENERATION	FEDERICI, Angelica S.
14:40	Development of an advanced tissue-engineering system through novel 3D printing fabrication methods	IGLESIAS-GARCÍA, Olalla
14:50	3D PRINTING AND MULTILAYERED ELECTROSPINNING - A NOVEL METHOD TO PRODUCE BIOMIMICKING HEART VALVES	BISCHOF, Lara

S17 Biomaterials, Stem Cells and Ostogenesis, Immunogenicity and Biocompatibility - Room: S3 B (28 Jun 2022, 13:30 - 15:00)

-Conveners: Aleksandra Klimczak; Pierre Tournier

time	title	presenter

13:30	From Geometrical Patterns to Bioinspired Topographies: Nanofibrillar Microbundles Induce Strong Topological Modulation of Primary Human Immune Cells	GROLL, Jürgen
13:50	Cell Membrane Camouflage Mesoporous Bioactive Glass Nanoparticles embedding Glucose Oxidase for Targeted Enhanced Tumor Therapy	SUI, Baiyan
14:00	COMBINING BIOPRINTING AND MELT-ELECTROWRITING TECHNIQUES IN A MULTI-MATERIAL APPROACH FOR THE REPLACEMENT OF THE TEMPOROMANDIBULAR JOINT	CAIADO DECARLI, Monize
14:10	PREDICTION OF IN VITRO SCAFFOLD LIFETIME THROUGH THERMALLY-ACCELERATED AGEING AND FTIR SPECTROSCOPY	ROHMAN, Geraldine
14:20	VORONOI DESIGN OF ADDITIVELY MANUFACTURED 3D-PRINTED PCL-HA SCAFFOLDS: COMPREHENSIVE IN VITRO AND IN VIVO CHARACTERIZATION	LAUBACH, Markus
14:30	Harnessing the immunomodulation potential of nanoclay – an analysis of macrophage response	KIM, Yang-hee
14:40	Effects of subtoxic concentrations of various metal ions on mesenchymal stem/stromal cells	HAHN, Olga
14:50	INDUCED MESENCHYMAL STEM CELLS AS A SECRETOME SOURCE FOR CNS REGENERATIVE THERAPIES: SIMILAR SECRETORY PROFILE BUT DECREASED REPLICATIVE SENESCENCE COMPARED TO BONE MARROW MESENCHYMAL STEM CELLS	SANTOS, Diogo J.

S16-1 Biomaterials from nature based on extracellular matrices: engineering, repopulation and regenerative potential - Room: S2 (28 Jun 2022, 13:30 - 15:00)

-Conveners: Sylvia Nürnberger; Andrea Barbero

time	title	presenter
13:30	Extracellular Matrix Derived Scaffolds for Cartilage and Osteochondral Defect Repair	KELLY, Daniel
13:50	CHARACTERIZING IN VIVO DEFORMATION DYNAMICS IN ORGAN SCAFFOLDS USING INTRAVITAL MICROSCOPY	CORRIDON, Peter
14:00	Development and characterisation of a novel 3D bioprinted biomimetic collagen and hyaluronic acid scaffold for the repair of cartilage defects	O'SHEA, Donagh
14:10	Decellularised pleural membranes in pulmonary regenerative medicine	VIKRANTH, Trisha
14:20	Designing a Peptide Hydrogel for Early Detection of Cancer	MAHON, Niall
14:30	Collagen/Pristine Graphene as an Electroconductive Interface Material for Neuronal Medical Device Applications	MAUGHAN, Jack
14:40	NOVEL HYPOXIA MIMICKING PEG-BASED NANO-BIOINK FOR CARTILAGE REGENERATION APPLICATION	RAVI, Subhashini
14:50	A scaffold-free graft for large critical size bone defect: preclinical evidence to clinical proof of concept	THEYS, Nicolas

S06 Advanced Biotechnology and Biofabrication approaches for soft tissue engineering and in vitro models: the ENLIGHT and BIRDIE perspective - Room: S3 A (28 Jun 2022, 13:30 - 15:00)

-Conveners: Riccardo Levato; Carlos Mota

time	title	presenter
13:30	Dynamic hydrogels for biofabrication	BAKER, Matthew

13:50	BIOPRINTING ON-CHIP MICROPHYSIOLOGICAL MODELS OF HUMANIZED KIDNEY TUBULOINTERSTITIUM (BIRDIE)	MOTA, Carlos
14:00	Optically-tuned bioresins for the ultra-fast volumetric bioprinting of hepatic organoid-laden biofactories	NUNEZ BERNAL, Paulina
14:10	DEVELOPMENT OF CONDUCTIVE STIMULI-RESPONSIVE FIBROUS HYDROGELS FOR NEURAL INTERFACES	ZARGARIAN, Seyed Shahrooz
14:20	3D BIOPRINTED CONSTRUCTS TO GENERATE MATURE ORGANOIDS FROM IPSC-DERIVED RENAL PROGENITORS	ADDARIO, Gabriele
14:30	A biofabrication technology for generating multiscale channels in hydrogels for complex 3D in vitro co-cultures	SEIJAS-GAMARDO, Adrián
14:40	Multimaterial complex tissue models via suspension media-enhanced volumetric bioprinting	RIBEZZI, Davide
14:50	KIDNEY-ON-A-CHIP - INTEGRATING GLOMERULAR FILTRATION AND TUBULAR REABSORPTION MODELS	JÄSCHKE, Michelle

S25+S64 Cellular senescence in tissue damage and regeneration + Understanding and preventing early inflammatory events that lead to development of osteoarthritis - Room: S4 C (28 Jun 2022, 13:30 - 15:00)

-Conveners: Mikolaj Ogrodnik; Markus Schosserer; Melanie Hart

time	title	presenter
13:30	Cellular senescence during aging and chronic diseases: mechanisms and therapeutic opportunities	JURK, Diana
13:50	How to leverage cellular senescence for regeneration: a story of three salamanders	YUN, Maximina
14:10	Characterization of cellular senescence in development, ageing and wounding of mouse skin by creation and exploration of the largest sc-RNA-seq database of murine skin cells	ROZMARIC, Tomaz
14:20	CELLULAR SENESCENCE IMPAIRS CHONDROGENIC DIFFERENTIATION OF MSCS VIA TGFB SIGNALING INTERFERENCE	NARCISI, Roberto
14:30	A QUANTITATIVE TACK ON THE NANO CONSTRUCT FOR THE MODULATION OF INFLAMMATORY CYTOKINES IN BURN SCARS	PANNEERSELVAM MANIMEGALAI, Nivethitha
14:40	A COMPARTMENTALIZED JOINT-ON-CHIP MODEL TO UNRAVEL THE ROLE OF CARTILAGE AND SYNOVIUM IN OSTEARTHRITIS PATHOGENESIS	PALMA, Cecilia
14:50	Combination of IL-1β and IL-17A synergistically induce an early inflammatory and degenerative expression profile in healthy chondrocytes and synovial fibroblasts	HART, Melanie

Coffee break & poster (15:00 - 15:30)

S07-2 Advances in cardiac tissue engineering: in vitro platforms and in vivo regeneration - Room: S3 A (28 Jun 2022, 15:30 - 17:00)

-Conveners: Valeria Chiono; Michael Monaghan

time	title	presenter
15:30	Effectiveness of human iPSC-derived cardiomyocytes, but not stromal cells ("MSC"), for heart repair	DULAK, Józef
15:50	Injectable hydrogel for microRNA release in cardiac regenerative medicine	NICOLETTI, Letizia

16:00	BIOFABRICATION OF SCAFFOLD-FREE 3D CELLULAR STRUCTURES USING MAGNETIC LEVITATIONAL ASSEMBLY TO STUDY CARDIAC TOXICITY	ONBAS, Rabia
16:10	AN INDUCED PLURIPOTENT STEM CELL-BASED MODEL TO STUDY THE MECHANOBIOLOGY OF MYOCARDIAL FIBROSIS	NIRO, Francesco
16:20	ELECTROCONDUCTIVE SCAFFOLDS FOR IN VITRO CARDIAC MODELS	SOLAZZO, Matteo
16:30	Harnessing the Potential of Immune Cells to Promote Cardiac Repair Following Myocardial Infarction	ALSHOUBAKI, Yasmin
16:40	Design and fabrication of advanced thick human cardiac engineered tissues	MAZO-VEGA, Manuel M.
16:50	BIOMECHANICALLY STIMULATED 3D ENDOTHELIAL GUT-ON-CHIP PLATFORM TO STUDY INTESTINE MICROBIOME AND IMMUNE SYSTEM INTERACTIONS	KUGIEJKO, Karol

S16-2 Biomaterials from nature based on extracellular matrices: engineering, repopulation and regenerative potential - Room: S2 (28 Jun 2022, 15:30 - 17:00)

-Conveners: Andrea Barbero; Sylvia Nürnberger

time	title	presenter
15:30	Whey Protein isolate: a multifunctional dairy-derived biomaterial	DOUGLAS, Timothy
15:50	HYDROLYTIC DEGRADATION CHARACTERIZATION OF 3D PRINTED POLYESTER SCAFFOLDS UNDER STATIC CONDITIONS AND FLOW PERFUSION	ALAMÁN-DÍEZ, Pilar
16:00	FIBRIN-BASED HYDROGELS WITH TUNEABLE MECHANICAL PROPERTIES	AL ENEZY-ULBRICH, Miriam Aischa
16:10	IMPROVED CELLULAR INFILTRATION BY GLYCOSAMINOGLYCANS REMOVAL AND ALTERED STIFFNESS - A STUDY ON AURICULAR CARTILAGE SCAFFOLDS.	CASADO LOSADA, Isabel
16:20	THE PREPARATION AND CHARACTERISATION OF POLY(3-HYDROXYBUTYRATE-co-4-HYDROXYBUTYRATE) [P(3HB-co-4HB)] BASED BIOCOMPOSITE FOR TRANSLATIONAL BIOMEDICAL APPLICATIONS	ALIAA, Nik
16:30	HUMAN EPIDERMAL SKIN EQUIVALENTS	BOYADJIEV, Alexander
16:40	PRODUCTION OF HIGHLY ANGIOGENIC HYDROGELS FROM THE EXTRACELLULAR MATRIX OF CULTURED STROMAL VASCULAR FRACTION OF ADIPOSE TISSUE	VILAÇA-FARIA, Helena
16:50	HOW NATURAL BIOMATERIAL CONSISTENCY LEADS TO PREDICTABILITY AND TUNABILITY	ZEGWAART, Jan-Philip

S15-1 Biologically inspired and Engineered disease models - Room: S1 (28 Jun 2022, 15:30 - 17:00)

-Conveners: Andrew Daly

time	title	presenter
15:30	Humanized platforms by convergence of biomaterials, cells and microtechnologies	YESIL-CELIKTAS, Ozlem
15:50	Tuning macrophage polarization to model myocardial infarction in the generation of functional cardiac organoids	SUKU, Meenakshi
16:00	RECONSTRUCTION OF FUNCTIONAL GRADIENTS USING MELT ELECTROWRITING	WŁODARCZYK-BIEGUN, Małgorzata

16:10	Tissue engineering a humanized rat model for osteosarcoma research	HUTMACHER, Dietmar W.
16:20	ELECTROSPUN PATCH DELIVERY OF ANTI-TNFα F(ab) ANTIBODY FRAGMENT FOR THE TREATMENT OF ORAL MUCOSAL INFLAMMATORY DISEASES	EDMANS, Jake
16:30	DOX-LOADED MPEG NANOPARTICLES AS A PROMISING TREATMENT IN A HUMANIZED MOUSE MODEL FOR BREAST CANCER BONE METASTASIS	FRANKENBACH, Tina
16:40	A 3D IN VITRO MODELS OF IMPAIRED OSTEOCYTES ACTIVITY UNDER EXPSOURE TO INDOXYL SULFATE	MIHĂILĂ, Silvia Maria
16:50	GLYCOTRIPEPTIDES SHOWCASE THE EFFECT OF GLYCOSYLATION ON PROTEIN AGGREGATION	BRITO, Alexandra

S22 Bringing together state-of-the-art quantitative biology and machine learning-based modeling for controlling and predicting cell and cell population phenotype in the context of regenerative medicine - Room: S4 C (28 Jun 2022, 15:30 - 17:00)

-Conveners: Yuto Takemoto; Bernd Rolauffs; Jesús Chato-Astrain

time	title	presenter
15:30	Image-based label-free analysis for quantitative and real-time understanding of cellular status	KATO, Ryuji
15:50	Basics of Cellular and Subcellular Mechanobiology	SCHLUNCK, Günther
16:10	CHONDROCYTE PROLIFERATION IS INFLUENCED MORE BY F-ACTIN DENSITY AND THE MACROSCOPIC TISSUE DISEASE STATE THAN BY CELL SHAPE OR MICROPATTERN GEOMETRY	ROLAUFFS, Bernd
16:20	Morphology-based detection of senescence in expanded mesenchymal stem cells	TAKEMOTO, Yuto
16:30	Using a machine learning-supported approach for assessing and predicting the susceptibility of articular cartilage to mechanical trauma-induced changes in cellularity	SELIG, Mischa
16:40	PREDICTION OF M1, M2A AND M2C MACROPHAGE PHENOTYPES AND THEIR IL-10 PRODUCTION POTENTIAL BASED ON SINGLE CELL MORPHOLOGY AND PROTEIN INTENSITY USING A NOVEL MACHINE-LEARNING BASED APPROACH	POEHLMAN, Logan
16:50	PREDICTION OF MEDICAL DEVICE COATING PROPERTIES VIA MACHINE LEARNING	GRIBOVA, Varvara

S04 3D Writing Within Suspension Media for Tissue Engineering and In Vitro Modeling - Room: S4 B (28 Jun 2022, 15:30 - 17:00)

-Conveners: Manuela E. Gomes; Rui M. A. Domingues; Chiara Scognamiglio

time	title	presenter
15:30	Bioprinting high cell-density tissue models through spheroid fusion in self-healing hydrogels	DALY, Andrew
15:50	3D printed anisotropic and porous dense collagen hydrogels to model skeletal muscle extracellular matrix	CAMMAN, Marie
16:00	CHEMICALLY FUNCTIONALIZABLE AND MECHANICALLY TUNABLE BIOMATERIAL FOR EMBEDDED 3D BIOPRINING	BECKER, Malin Lea
16:10	An open source extrusion bioprinter based on the E3D motion system and tool changer to enable FRESH and multimaterial bioprinting	STELZL, Christina

16:20	High resolution light-based 3D printing of cell-laden bio constructs	MADRID-WOLFF, Jorge
16:30	Magnetically-Assisted 3D Bioprinting of Tissue Engineered Tendons	PARDO MONTERO, Alberto
16:40	Development of bioprinted osteochondral tissue: an in-vitro model for drug discovery	JAHANGIR, Shahrbanoo

S03+S33 3D printing of bionic organs – how far are we from clinical application? + From Bench-to-Bedside: Translating 3D Printing Applications in Tissue Engineering and Regenerative Medicine - Room: S3 B (28 Jun 2022, 15:30 - 17:00)

-Conveners: Marta Klak; Jakub Rybka; Lukasz Witek; James E. Smay; Anahita Ahmadi Soufivand

time	title	presenter
15:30	3D-bioprinted bionic pancreas as an innovative method of treating and preventing diabetes – how far we are from clinical aplication?	WSZOŁA, Michał
15:50	Tissue Engineered Scaffolds For Tracheal Regeneration: A seeding approach in a multi-layered 3D printed scaffold	SORIANO, Luis
16:00	Bone Regenerative Capacity of 3D Printed Bioactive Ceramic Scaffolds Coated with Bioactive Molecule: Dipyridamole	WITEK, Lukasz
16:10	SCAFFOLD GUIDED BONE TISSUE ENGINEERING FOR THE ASSESSMENT OF BONE DEFECT RECONSTRUCTION – PRE-CLINICAL AND CLINICAL TRIALS	MEDEIROS SAVI, Flavia
16:20	SELF-ASSEMBLING PEPTIDE HYDROGELS AS BIOINKS FOR 3D BIOPRINTING APPLICATIONS	GINJAUME, Albert
16:30	BIODEGRADABLE AND BIOACTIVE PERSONALIZED IMPLANT FOR GUIDED BONE REGENERATION	REY-VIÑOLAS, Sergi
16:40	BONE REGENERATION EXPLOITING CORTICOPERIOSTEAL TISSUE TRANSFER FOR SCAFFOLD-GUIDED BONE REGENERATION	HUTMACHER, Dietmar W.
16:50	Meniscus regeneration of the future. From the slaughterhouse, through cell culture to 3D bioprinting.	RYBKA, Jakub

S68 Human brain organoids versus assembloids approach for neurodevelopmental studies - Room: S4 A (28 Jun 2022, 15:30 - 17:00)

-Conveners: Arti Ahluwalia; Leonora Bużańska; Chiara Rinoldi

time	title	presenter
15:30	Development of the integrated human brain organoids	PARK, In-Hyun
15:50	In vitro modeling of human brain region interactions	REUMANN, Daniel
16:10	ADVANCED IN SILICO METHODS FOR ORGANOID AND ASSEMBLOID DESIGN	MAGLIARO, Chiara
16:20	PHYSIOLOGICAL NORMOXIA INFLUENCE NEURAL CELL FATE THROUGH CHANGES OF MITOCHONDRIAL DYNAMICS AND GLYCOLYSIS/OXPHOS SWITCH IN HUMAN BRAIN ORGANOID MODEL	LIPUT, Michal
16:30	Establishing tools to study the emergence of cellular diversity in the human brain	NOWAKOWSKI, Tomasz
16:50	Round Table Discussion (10 minutes)	

Coffee break & poster (17:00 - 17:30)

Awards Session - Room: S1 (28 Jun 2022, 17:30 - 19:00)

General Assembly - Room: S1 (28 Jun 2022, 19:00 - 20:00)

Welcome reception (20:00 - 22:00)

Wednesday, 29 June 2022

P1 Plenary Session: Gerjo van Osch (plenary lecture) Cartilage regeneration: the challenges of regenerating a “simple” non-vascularised tissue - Room: S1 (29 Jun 2022, 09:00 - 10:00)

-Conveners: Geoff Richards

time	title	presenter
09:00	Cartilage regeneration: the challenges of regenerating a “simple” non-vascularised tissue	VAN OSCH, Gerjo

Debate 1: Regeneration of human joints (Prof. Alicia El Haj, Prof. Fergal O'Brien, Prof. Geoff Richards, Prof. Gerjo van Osch) - Room: S1 (29 Jun 2022, 10:00 - 10:30)

-Conveners: Martin Stoddart

time	title	presenter
10:00	Debate: Regeneration of human joints	EL HAJ, Alicia O'BRIEN, Fergal RICHARDS, Geoff VAN OSCH, Gerjo

Coffee break & poster (10:30 - 11:00)

S10-1 Biofabricated Tissues and Organs for Clinical Impact - Room: S1 (29 Jun 2022, 11:00 - 12:30)

-Conveners: Andrew Daly; Laura De Laporte

time	title	presenter
11:00	Biofabricated Articular and Cardiac Tissues for Clinical Impact	MALDA, Jos
11:20	PHYSIOMIMETIC CULTURE OF MESENCHYMAL STROMAL CELLS AFFECTS MACROPHAGE ACTIVITY IN A PARACRINE MANNER	FALCONES, Bryan
11:30	Engineered and decellularized human cartilage grafts instruct full regeneration of critical-sized femoral defects	GARCIA GARCIA, Alejandro
11:40	A WOVEN VASCULAR GRAFT PRODUCED FROM YARN OF HUMAN AMNIOTIC MEMBRANE	L'HEUREUX, Nicolas
11:50	Philosophy of science, a tool to face engineered liver challenges	GUILLET, Manon
12:00	TOWARDS FABRICATION OF A TRIPLE CULTURE LIVER SINUSOID MODEL UTILIZING 3D CORE-SHELL BIOPRINTING	LODE, Anja
12:10	LIVER MATRIX AND PERFUSION BIOREACTOR CULTURE PROMOTE AMNION EPITHELIAL CELL DIFFERENTIATION INTO FUNCTIONAL HEPATOCYTES	CAMPINOTI, Sara
12:20	A modular bioreactor for dynamic culturing of human multilayer tissues structures	GASPERINI, Luca

S12 Biofabrication with light-based technologies and high-definition printing - Room: S3 B (29 Jun 2022, 11:00 - 12:30)

-Conveners: Tiziano Serra; Marcy Zenobi-Wong

time	title	presenter
11:00	Light-driven technologies to steer the functionality of volumetric engineered tissues and organoids	LEVATO, Riccardo

11:20	LASER-BASED HIGH-RESOLUTION 3D PRINTING AND BIOPRINTING FOR TISSUE ENGINEERING	OVSIANIKOV, Aleksandr
11:40	HARNESSING MICROFLUIDIC BIOPRINTING TO FABRICATE GRADIENT-LIKE POROUS 3D CONSTRUCTS VIA EMULSION INK DEPOSITION	MARCOTULLI, Martina
11:50	BOTTOM-UP TISSUE ENGINEERING BASED ON MICROSCAFFOLDS PRODUCED BY HIGH-RESOLUTION 3D PRINTING	KOPINSKI-GRÜNWALD, Oliver
12:00	DEFINED-GEOMETRY MICROPARTICLES PRODUCED BY TWO-PHOTON POLYMERISATION FOR SKELETAL APPLICATIONS	OWEN, Robert
12:10	Microfluidics-assisted bioprinting of double-emulsion droplets	TERRAZAS MALLEA, Ronald
12:20	EFFECT OF LIGHT STIMULI IN VOLUMETRIC BIOPRINTING ON CELL FUNCTIONALITY AT SINGLE CELL LEVEL	GUEYE, Marième

S48 Next Generation Biomaterials of Stem Cell Culture and Differentiation for Stem Cell Therapy - Room: S4 A (29 Jun 2022, 11:00 - 12:30)

-Conveners: Joanna Idaszek; Elena Della Bella; Bryan Falcones

time	title	presenter
11:00	MICROPATTERNED SURFACES FOR CONTROLLING STEM CELLS MORPHOLOGY AND FUNCTIONS	CHEN, Guoping
11:20	HYALURONIC ACID BASED NEXT-GENERATION BIOINK FOR 3D BIOPRINTING OF A HUMAN STEM CELL DERIVED CORNEAL STROMA EQUIVALENT AND A 3D CORNEA TISSUE MODEL WITH INNERVATION	MÖRÖ, Anni
11:30	DEVELOPMENT OF AN IPSC LOADED BIOMIMETIC SCAFFOLD SYSTEM FOR SPINAL CORD APPLICATIONS	O' CONNOR, Cian
11:40	ROAD TO UNIVERSAL ORGANS: DECELLULARIZED LIVER REPOPULATION WITH HLA I-II KNOCKOUT HEPATOCYTES IN A DYNAMIC BIOREACTOR CULTURE	CACIOLLI, Lorenzo
11:50	MULTIFUNCTIONAL 3D BIOPRINTING FOR TISSUE INTERFACES	ŞENTÜRK, Efsun
12:00	LUNG TISSUE TYPE SELECTED AMNIOTIC FLUID DERIVED MESENCHYMAL STEM CELLS FOR TREATMENT OF BLEOMYCIN INDUCED PULMONARY FIBROSIS IN A RAT MODEL	TALTS, Jan
12:10	Interplay between adipose-derived stem cells and inflammatory mediators: impact on neurite outgrowth and vascular morphogenesis	L. AFONSO, João
12:20	TOWARDS APPLICATION OF CELL THERAPY USING hiPSC-DERIVED MSCs AS A STABLE ‘OFF-THE-SHELF’ CELL SOURCE	RAMOS, Yolande F. M.

S28 Emerging and future technologies for peripheral nerve regeneration - Room: S4 C (29 Jun 2022, 11:00 - 12:30)

-Conveners: Srinivas Madduri; Neha Tiwari

time	title	presenter
11:00	Unveiling the Multiple Roles of Stem Cells Secretome in Nerve Regeneration	SALGADO, Antonio
11:20	Novel bioengineering approach for enhancing the nerve tissue regeneration process	MADDURI, Srinivas
11:40	THREE-DIMENSIONAL SCAFFOLDS BY MULTI-PHOTON POLYMERIZATION AS A CO-CULTURE SYSTEM FOR TISSUE REGENERATION	KORDAS, Antonis

11:50	An advanced nerve guidance conduit for repairing large peripheral nerve defects	KOCI, Zuzana
12:00	ALIGNED AND CONDUCTIVE 3D COLLAGEN/PPY SCAFFOLDS FOR PERIPHERAL NERVE TISSUE ENGINEERING	TRUEMAN, Ryan
12:10	EXTRACELLULAR VESICLES IN PERIPHERAL NERVE REGENERATION: EXTRACELLULAR VESICLES DERIVED FROM ADIPOSE STEM CELLS INCREASE SCHWANN CELL PROLIFERATION FOLLOWING INTERNALIZATION	HAERTINGER, Maximilian

S62 Tissue regeneration by integration of bioinspired materials - Room: S4 B (29 Jun 2022, 11:00 - 12:30)

-Conveners: Sandra Van Vlierberghe; Heungsoo Shin

time	title	presenter
11:00	TBA	RODRÍGUEZ-CABELLO, José Carlos
11:20	The Controlled Delivery of Proteoglycan-4 in a Scaffold-Based System for Cartilage Repair Applications	MATHESON, Austyn
11:30	Hybrid 3D-printed hydrogel scaffolds for liver tissue engineering	CARPENTIER, Nathan
11:40	Combining proteolytic sequences, VEGF-mimetic peptide and laminin-derived peptide within Elastin-Like Recombinamer scaffolds for the spatiotemporal direction of angiogenesis and neurogenesis	GONZÁLEZ-PÉREZ, Fernando
11:50	TIME COURSE OF ECTOPIC BONE FORMATION IN RATS INDUCED BY rhBMP6 WITHIN AUTOLOGOUS BLOOD COAGULUM WITH CALCIUM PHOSPHATE CERAMIC PARTICLES	STOKOVIC, Nikola
12:00	Prognostic evaluation of the use of three-dimensional (3D) scaffolds on chronic skin lesions using new biomedical imaging technologies.	CAVALLINI, Chiara
12:10	HEPARAN SULPHATE ANALOGUE HYDROGELS AS A PLATFORM FOR KIDNEY ORGANOID MATURATION	FAGIOLINO, Sveva
12:20	DIRECTING STEM CELL COMMITMENT IN 3D BIOINSPIRED HYDROGELS BY GROWTH FACTOR SEQUESTRATION USING MOLECULARLY IMPRINTED NANOPARTICLES	TEIXEIRA, Simão P. B.

S43-1 Multifunctional biomaterials supporting bone regeneration - Room: S2 (29 Jun 2022, 11:00 - 12:30)

-Conveners: Timothy Douglas; Elżbieta Pamuła

time	title	presenter
11:00	Current status and future prospects of genome-scale metabolic modeling to optimize the use of mesenchymal stem cells in regenerative medicine	SIGURJÓNSSON, Olafur
11:20	OSTEOINDUCTIVE INJECTABLE CALCIUM PHOSPHATE BIOACTIVATED BY PHOSPHOSERINE DENDRONS	GRAZIA RAUCCI, Maria
11:40	MECHANICAL STIMULATION PROMOTES THE OSTEOGENIC RESPONSE OF PRE-OSTEOBLASTS ON POLYMERIC SCAFFOLDS	CHATZINIKOLAIDOU, Maria
11:50	Biofabrication of the vascularised osteogenic niche	PARMENTIER, Laurens
12:00	Calcium phosphate based biomaterials influence on cell metabolism	FAN, Jingzhi
12:10	Evaluation of β tricalcium phosphate and poly(3-hydroxybutyrate) -based scaffolds for bone tissue regeneration	SKIBIŃSKI, Szymon

12:20	OSTEOGENIC ACTIVITY OF ADDITIVE MANUFACTURED TITANIUM ALLOY-CALCIUM PHOSPHATE CERAMIC SCAFFOLDS FOR CRANIOPLASTY IN VITRO AND IN A LARGE ANIMAL CALVARIAL DEFECT MODEL	NIKODY, Martyna

S13-2 Biofunctionalized surfaces for cellular and tissue engineering - Room: S3 A (29 Jun 2022, 11:00 - 12:30)

-Conveners: Rui L. Reis

time	title	presenter
11:00	ELECTROACTIVE POLYCAPROLACTONE-GRAPHENE NANOCOMPOSITES COMBINED WITH ZINC IONS TRIGGER MYOGENIC DIFFERENTIATION	APARICIO COLLADO, Jose Luis
11:10	Probing T Cell Mechanosensitivity using Artificial Antigen-Presenting Cells	ALATOOM, Aseel
11:20	Cell-selective adhesion short peptides for enhancing cell culture on scaffold	FUJIMOTO, Akiyo
11:30	ANTIBACTERIAL ALBUMIN-TANNIC ACID COATINGS FOR SCAFFOLD-GUIDED BREAST RECONSTRUCTION	COMETTA, Silvia
11:40	POLY(ARGININE) AND HYALURONIC ACID FILM: A MULTIFUNCTIONAL COATING FOR SCAFFOLDS AND INVASIVE MEDICAL DEVICES: THE CASE OF CAVI-T INTRANASAL BALLOON	CALLIGARO, Cynthia
11:50	Innovative Hydrogel to Overcome the Glioblastoma Therapy Deadlock	SUSANA COSTA MACHADO FERREIRA, Helena
12:00	BUILDING BARRIERS: ENGINEERING A NOVEL IN VITRO MODEL OF THE BLOOD-BRAIN BARRIER	SCHOFIELD, Christina
12:10	Novel Elastomer Surface Modification Technique for Corneal Limbal Epithelial Stem Cell Investigation	DIMMOCK, Ryan
12:20	The effect of Auxetic metamaterial scaffolds in osteogenic differentiation of Mesenchymal Stem Cells	FLAMOURAKIS, George

Lunch & Meet the Mentor (12:30 - 13:30)

S30 European regional platforms for TERM - Update - Room: S4 C (29 Jun 2022, 13:30 - 15:00)

-Conveners: Gerjo van Osch; Heinz Redl

time	title	presenter
13:30	Belgium Example - Gent Platform Advanced Therapies and Tissue Engineering	AMONS, Gudrun
13:40	UK Example - Regenerative Medicine Platform UKRMP II	OREFFO, Richard
13:50	REGENERATIVE MEDICINE AND TECHNOLOGY – A NEW BACHELOR PROGRAM	BAUER, Jurica
14:00	Netherland Example - RegMedXB	MULDER, Bernard
14:10	Ireland Example - CURAM-A National Center for Research in Medical Devices	PANDIT, Abhay
14:20	Austrian Example - Austrian Cluster for Tissue Regeneration	REDL, Heinz
14:30	Round table discussion (30 minutes)	

S43-2 Multifunctional biomaterials supporting bone regeneration - Room: S2 (29 Jun 2022, 13:30 - 15:00)

-Conveners: Elżbieta Pamuła; Timothy Douglas

time	title	presenter

13:30	CONTROLLED DELIVERY OF EPIGENETICALLY ACTIVATED EXTRACELLULAR VESICLES FROM A GELMA/NANOCLAY HYDROGEL FOR BONE REGENERATION	MAN, Kenny
13:40	BONE REGENERATION OF A CRITICAL-SIZED DEFECT IN SHEEP WITH A 3D PRINTED SCAFFOLD COATED WITH A BIOMETIC FILM CONTAINING LOW-DOSE OF BMP-2	SCHOFFIT, Sarah
13:50	New surface functionalities from grafting natural biomolecules to titanium alloys	GAMNA, Francesca
14:00	ENGINEERING OF A BRIDGE PROTEIN TO IMPROVE THE DELIVERY OF BMP-2 FROM COLLAGEN SPONGE AND ENHANCE BONE REGENERATION FOR SPINAL FUSION	BRIQUEZ, Priscilla
14:10	PCL reinforced collagen scaffolds for endochondral healing of bone defects	LEEMHUIS, Hans
14:20	MICROSTRUCTURE EFFECT ON BONE FORMATION OF A FUNCTIONALLY GRADED SCAFFOLD USING A MECHANOSTAT-BASED MODEL	ALIPOUR GHASSABI, Ata
14:30	EFFECT OF 3D SCAFFOLD MORPHOLOGY ON BONE TISSUE REGENERATION BASED ON A MULTI-PHYSICS FEM MODEL	OZTURK, Sezen
14:40	DELIVERY OF MESENCHYMAL STROMAL CELLS USING COLLAGEN MEMBRANES EMBEDDED IN LEGO®-INSPIRED MULTICOMPONTENT SCAFFOLDS FOR PERSONALISED MANDIBULAR DEFECT REPAIR	PHELIPE HATT, Luan
14:50	Composite Biomaterial-Ink with Hyaluronan, Collagen and Calcium Phosphate Particles for Delivery of Chemically Modified RNA to promote Bone Regeneration	VAN DER HEIDE, Daphne

S24 Cell-rich constructs for tissue engineering - Room: S1 (29 Jun 2022, 13:30 - 15:00)

-Conveners: Christina Schofield; Manuel Salmeron-Sanchez; Elana Meijer

time	title	presenter
13:30	High cells/biomaterials ratio approaches in tissue engineering	MANO, João
13:50	PAPILLARY AND RETICULAR FIBROBLASTS GENERATE DISTINCT MICROENVIRONMENTS THAT DIFFERENTIALLY IMPACT ANGIOGENESIS	MULLER, Laurent
14:00	AN IN VITRO IMMUNOCOMPETENT HUMAN TISSUE-ENGINEERED MODEL OF ATOPIC DERMATITIS FOR DRUG TESTING	BARRAGAN VAZQUEZ, Inmaculada
14:10	IS MORE ALWAYS BETTER? MODULATING HUMAN ADIPOSE DERIVED STROMAL CELLS CHONDROGENESIS TO ACHIEVE OPTIMAL BONE REMODELING IN VIVO	CHAABAN, Mansoor
14:20	LAMINARAN/PLATELET LYSATE-BASED HYDROGELS: TOO GOOD TO BE TRUE	ZARGARZADEH, Mehrzad
14:30	Perfusion Flow on urogenital epithelial cells for urethral tissue engineering purposes	DE GRAAF, Petra
14:40	INTERLEUKIN 1 BETA MODULATES THE EQUINE TENOCYTE TRANSCRIPTOME IN 3D CULTURE BY ENHANCING NF-KB SIGNALLING	BEAUMONT, Ross
14:50	Optimisation of bioprocessing conditions for an implantable myoblast-microcarrier combination for treatment of incontinence	CARTAXO, Ana Luísa

S37 Human Organoids for Musculoskeletal Tissues - Room: S4 A (29 Jun 2022, 13:30 - 15:00)

-Conveners: Debby Gawlitta; Xiao-hua Qin

time	title	presenter

13:30	Engineering Grafts for Joint Regeneration using Phenotypically Distinct Cartilaginous Microtissues	KELLY, Daniel
13:50	Structural support for human cartilage organoids	MALDA, Jos
14:10	Microengineered 3D Bone Cell Models via Image-guided Two-photon Subtractive Lithography	QIN, Xiao-hua
14:20	Increased cell density increases mineral formation rates and stiffness in 3D bioprinted patient-derived bone organoids using dynamic loading	DE LEEUW, Anke
14:30	Directing human mesenchymal stem cells differentiation towards hypertrophic chondrocytes using fiber-reinforced bone dECM hydrogel scaffolds	IDASZEK, Joanna
14:40	THE INTERPLAY BETWEEN IMMUNE RESPONSE AND BONE FORMATION FROM DEVITALIZED ALLOGENEIC CELLS	DE SILVA, Leanne
14:50	TOWARDS BONE-REMODELING-ON-A-CHIP: FORMATION OF 3D BONE-LIKE TISSUES	VIS, Michelle

S31 Extracellular vesicles – next generation tool for diagnostics and regenerative medicine - Room: S3 A (29 Jun 2022, 13:30 - 15:00)

-Conveners: Ewa Zuba-Surma; Barbara Łukomska; Dario Manzanares Sandoval

time	title	presenter
13:30	UNSOLVED MYSTERIES AND CURRENT OPPORTUNITIES IN EXTRACELLULAR VESICLES	WITWER, Kenneth
13:50	MESENCHYMAL STEM CELL-DERIVED EXTRACELLULAR VESICLES AND THEIR FUNCTIONAL HETEROGENEITY	GIEBEL, Bernd
14:10	EXTRACELLULAR BIOADDITIVES-ADJUVANTED INJECTABLE HYDROGEL SUPPORTS NEOANGIOGENESIS AND DAMPENS ADVERSE CARDIAC REMODELLING	MAIULLARI, Fabio
14:20	EXTRACELLULAR VESICLES FROM HUMAN IPS CELLS ENHANCE RECONSTITUTION CAPACITY OF CORD BLOOD-DERIVED HEMATOPOIETIC STEM AND PROGENITOR CELLS	KARNAS, Elżbieta
14:30	INTRA-TRACHEAL INJECTION OF HUMAN EXTRACELLULAR VESICLES BLOCKS FIBROSIS AND REGENERATES EPITHELIAL LUNG CELLS IN A RAT MODEL OF BRONCHOPULMONARY DYSPLASIA	MAGAROTTO, Fabio
14:40	DEVELOPMENT OF BIOINSPIRED PROTEOLIPOSOMES AND CELL-DERIVED NANOVESICLES AS OSTEOGENIC SYNTHETIC EXTRACELLULAR VESICLES FOR BONE REGENERATION	BRUNET, Mathieu Y.
14:50	SECRETOME OF ADIPOSE TISSUE DERIVED STEM CELLS AND ELECTRICAL EPIDURAL STIMULATION PROMOTES FUNCTIONAL GAINS IN SPINAL CORD INJURY CONTEXT	RIBEIRO, Jorge

S38 Injectable biomaterials for cell-instructive matrix cues - Room: S3 B (29 Jun 2022, 13:30 - 15:00)

-Conveners: Mirosława El Fray

time	title	presenter
13:30	ENGINEERING INJECTABLE THERAPEUTIC BIOMATERIALS FOR MUSCO-SKELETAL TISSUE REPAIR/REGENERATION	AMBROSIO, Luigi
13:50	In situ assembling biohybrid polymer hydrogels to modulate cell-instructive matrix cues	WERNER, Carsten
14:10	FIREFLY-INSPIRED BIOMATERIALS AS TUNABLE, TRIGGERABLE, AND CELL-INSTRUCTIVE MATRICES FOR 3D CELL ENCAPSULATION	PAEZ, Julieta

14:20	DEVELOPMENT OF IN SITU CROSSLINKABLE BIORESPONSIVE ALGINATE HYDROGELS	V. MAGALHÃES, Mariana
14:30	Injectable nanofibrous microscaffolds for cell and drug delivery	NAKIELSKI, Paweł
14:40	Clickable amphiphile alginate produces dynamic 3D cell microenvironments with microstructured hydrophobic domains	NEVES, Mariana I.
14:50	Engineering Cell-Instructive Microenvironments Using Injectable, Topographically-Textured Polymeric Matrices	AMER, Mahetab

S20 Biomimetic in vitro models for bone regeneration and cancer pathologies - Room: S4 B (29 Jun 2022, 13:30 - 15:00)

-Conveners: Silvia Farè; Gabriela Graziani

time	title	presenter
13:30	Engineering 3D Human Multicellular Bone Models as Anti-metastastic Drug Screening Platforms	MORETTI, Matteo
13:50	In vitro testing of bone biomaterials - opportunities and challenges	STODDART, Martin
14:10	IN VITRO BONE MARROW NICHE FOR METASTASIS ASSAY	WENTA, Tomasz
14:20	Bridging the gap between the immune response and mineralization during fracture healing	LACKINGTON, William
14:30	Biogenic and biomimetic nanocoatings for bone modelling and regeneration	GRAZIANI, Gabriela
14:40	Algorithmic Engineering enabling Organotypical Print Templates at Scale	ERBEN, Amelie
14:50	Biofabrication of tumor models that mimic the tumor microenvironment using extrusion bioprinting	ARJOCA, Stelian

Coffee break & poster (15:00 - 15:30)

S47 New insights underlying mesenchymal stem cell-mediated bone regeneration - Room: S2 (29 Jun 2022, 15:30 - 17:00)

-Conveners: Kamal Mustafa; Cecilie Gjerde

time	title	presenter
15:30	STEM CELLS IN BONE REGENERATION, A RANDOMIZED CLINICAL TRIAL	GJERDE, Cecilie
15:50	Bone-Marrow Mesenchymal Stem/Stromal Cells Have Enhanced Vasculogenic Potency Over Adipose Stem/Stromal Cells in Perfused In Vitro Cultures	MIETTINEN, Susanna
16:10	Extracellular Vesicles Secreted by Osteogenic-Differentiated Mesenchymal Stem Cells Promote Bone Formation In Rat Calvarial Defect	MUSTAFA, Kamal
16:20	DEVELOPMENT OF ANGIOGENIC BIOINK FOR VASCULARIZED BONE TISSUE ENGINEERING	KORKEAMÄKI, Jannika
16:30	MACROPHAGE MEDIATED IMMUNOMODULATION BY EXTRACELLULAR VESICLES DERIVED FROM MESENCHYMAL STROMAL CELLS COMBINED WITH BIPHASIC CALCIUM PHOSPHATE GRANULES FOR BONE REGENERATION	RANA, Neha
16:40	THE INFERIOR IN VIVO OSTEOGENICITY OF HUMAN MSC FROM ADIPOSE TISSUE COMPARED TO BONE MARROW IS CORRELATED WITH HIGHER IMMUNE RESPONSE WITHIN TISSUE ENGINEERED CONSTRUCTS	LOGEART-AVRAMOGLOU, Delphine

16:50	Fluid-flow mediated cytoskeletal adaptation regulates the growth and fate of bone marrow mesenchymal stem cells	YAMADA, Shuntaro

S41 Mesenchymal Stem / Stromal Cells - from basic research through clinical studies to registered products - Room: S3 A (29 Jun 2022, 15:30 - 17:00)

-Conveners: Marcin Majka; Ewa Zuba-Surma; Maria Rita Citeroni

time	title	presenter
15:30	MSC THERAPY: CLINICAL EVIDENCE AND SCIENTIFIC PROGRESS	DAWN, Buddhadeb
15:50	CONTROLLED DRUG RELEASE FOR TREATING SCI: TARGETING NEUROBIOLOGY MECHANISM IDENTIFIED BY STEM CELL-BASED MULTIMODAL APPROACHES	TENG, Tang D.
16:10	SURVIVING MESENCHYMAL STEM/STROMAL CELLS UPON INTRA-ARTICULAR DELIVERY IN AN OSTEOARTHRITIC JOINT EXPRESS A NEW CHONDROPROGENITOR GENE BMP/RETINOIC ACID-INDUCIBLE NEURAL-SPECIFIC PROTEIN 3 (BRINP3)	IVANOVSKA, Ana
16:20	EFFECT OF DIFFERENT LIGHT WAVELENGTHS ON ADIPOSE TISSUE-DERIVED MESENCHYMAL STEM/STROMAL CELLS	SRIDHARAN, Kaarthik
16:30	MULTIPLE WHARTON JELLY MESENCHYMAL STEM CELLS-DERIVED HE-ATMP TRANSPLANTATIONS OVERCOMES DRUG-RESISTANT EPILEPSY IN CHILDREN	MILCZAREK, Olga
16:40	CHAOTIC PRINTING OF HYDROGEL CARRIERS FOR MESENCHYMAL STEM CELL PROLIFERATION	DEAN, David
16:50	TAKING A STEP AHEAD: ENDOCHONDRAL BONE REGENERATION OF A CRITICAL SIZE DEFECT IN A LARGE ANIMAL MODEL	STAUBLI, Flurina

S11 Biofabrication using extrinsic fields - Room: S3 B (29 Jun 2022, 15:30 - 17:00)

-Conveners: Tiziano Serra; Luis Soriano

time	title	presenter
15:30	Ultrasound-based assembly of tissues and biomaterials	ARMSTRONG, James
15:50	HIGH-RESOLUTION TWO-PHOTON POLYMERIZATION OF ENGINEERED CELL MICROENVIRONMENTS FOR FUNDAMENTAL NEURO-MECHANOBIOLOGY AND BRAIN CANCER PROTON RADIOTHERAPY	ACCARDO, Angelo
16:10	4D BIOFABRICATION OF NERVE GUIDE CONDUITS USING RESPONSIVE MATERIALS	TIWARI, Neha
16:20	ENGINEERING DORSAL ROOT GANGLION MULTICELLULAR SYSTEM TOWARDS IN VIVO CROSS EXCITATION FUNCTION	MA, Junxuan
16:30	CONTROLLING THE SHAPE OF MICROCAPILLARY NETWORKS IN 3D IN VITRO MODELS THROUGH SOUND PATTERNING	DI MARZIO, Nicola
16:40	EFFECT OF SECOND STAGE HEATER ON MEW PROCESSING PARAMETERS	CHANDRAKAR, Amit
16:50	Cell density matters: Local cell density enhancement by sound to increase the therapeutic efficacy in regenerative medicine	GÉRALDINE GUEX, Anne

S27+S56 Combined therapies for severely infected wounds accompanied with both heavy soft and hard tissue losses + Skin wound healing in 2022: where basic science meets clinical needs - Room: S4 B (29 Jun 2022, 15:30 - 17:00)

-Conveners: Farzaneh Moghtader; Alexandra P. Marques

time	title	presenter
15:30	TBA	TÉOT, Luc
15:50	Multifunctional Bio-hybrids Composed of Gelatin Microspheres Carrying Bacteriophages and/or bFGF and Their Aggregates with Mesenchymal Stem Cells	MOGHTADER, Farzaneh
16:10	3D in vitro M2 macrophage model to mimic modulation of tissue repair	SAPUDOM, Jiranuwat
16:20	IN VITRO COMPARISON OF SELF-ASSEMBLED AND PLASMA-BASED TISSUE ENGINEERED SKIN SUBSTITUTES: TWO DIFFERENT MANUFACTURING PROCESSES FOR THE TREATMENT OF SEVERE BURN PATIENTS	SIERRA-SÁNCHEZ, Álvaro
16:30	Intradermal adipocytes differentiation and lipid metabolism are regulated through epidermal transcription factor Foxn1	WALENDZIK, Katarzyna
16:40	Dense Collagen/PLGA Composite Hydrogels Generated by In Situ Nanoprecipitation as Novel Medicated Wound Dressings: In Vitro and In Vivo Evaluation	HELARY, Christophe
16:50	HATMSC SECRETED FACTORS IN THE HYDROGEL AS A POTENTIAL TREATMENT FOR CHRONIC WOUNDS—IN VITRO STUDY	KRASKIEWICZ, Honorata

S15-2 Biologically inspired and Engineered disease models - Room: S1 (29 Jun 2022, 15:30 - 17:00)

-Conveners: Y. Shrike Zhang

time	title	presenter
15:30	INVESTIGATING THE EFFECT OF APOLIPOPROTEIN E4 ON PERICYTE CONTRACTION	POLLERES, Marlene
15:40	INACTIVATED SARS-COV-2 VIRAL PARTICLES PROMOTE CILIATION IN TISSUE-ENGINEERED 3D AIRWAY TRI-CULTURES	GONZALEZ-RUBIO, Julian
15:50	A TISSUE ENGINEERING MODEL OF CRANIOSYNOSTOSIS TO IDENTIFY NEW THERAPEUTIC TARGETS THAT ACCELERATE BONE HEALING IN ADULTS	MEYER, Mariangela
16:00	Towards the development of multiaxial loading bioreactor for intervertebral disc studies: validation of an ex vivo organ model and customized sample holder	ŠEĆEROVIĆ, Amra
16:10	Culture of cancer spheroids and evaluation of anti-cancer drugs in 3D-printed miniaturized continuous stirred tank reactors (mCSTRs)	ALVAREZ, Mario
16:20	COLLAGEN-BASED 3D CO-CULTURE MODEL TO INVESTIGATE THE MULTIPLE MYELOMA MICROENVIRONMENT IN BONE MARROW	HERRMANN, Marietta
16:30	PRECLINICAL 3D BIOPRINTED MODEL OF OVARIAN CANCER TUMOR MICROENVIRONMENT TO TEST miRNA-BASED PERSONALIZED THERAPIES	SCOGNAMIGLIO, Chiara
16:40	A BIOPRINTED RHABDOMYOSARCOMA MODEL WITH MACROMOLECULAR CROWDING TO STIMULATE EXTRACELLULAR MATRIX PROTEIN DEPOSITION	D'AGOSTINO, Stefania
16:50	Biological and Mechanical Unique Extracellular Matrix Among Different Subtypes of Dystrophic Epidermolysis Bullosa	MALTA, Mariana D.

S23+S31+S32 Can we bioengineer tissues using artificial cells? + Extracellular vesicles – next generation tool for diagnostics and regenerative medicine + Extracellular vesicles for soft tissue repair - Room: S4 A (29 Jun 2022, 15:30 - 17:00)

-Conveners: Anne Des Rieux; Barbara Łukomska; Catherine Le Visage; Ewa Zuba-Surma; Paula Vena

time	title	presenter
15:30	Artificial cells with communicative features, toward hybrid organoids	VAN HEST, Jan
15:50	First steps toward bioprinting artificial cells	DUARTE CAMPOS, Daniela
16:10	Tenocyte conditioned media and its potential applications for immunomodulation.	FORSYTH, Nicholas
16:20	MATRIX-BOUND NANOVESICLES AS SELECTIVE MODULATORS OF THE IMMUNE RESPONSE	CAPELLA-MONSONIS, Hector
16:30	Matrix Bound Nanovesicles as an Immunomodulatory Therapy for Rheumatoid Arthritis	CRUM, Raphael
16:40	ELUCIDATING THE BIOGENESIS OF MATRIX-BOUND NANOVESICLES	DEWEY, Marley
16:50	PLATELET-DERIVED EXTRACELLULAR VESICLES SHOW THERAPEUTIC EFFECTS ON A 3D TENDON DISEASE MODEL	GRAÇA, Ana Luísa

Coffee break & poster (17:00 - 17:30)

P2 Plenary Session: Ali Khademhosseini (plenary lecture) - Engineering in Precision Medicine - Room: S1 (29 Jun 2022, 17:30 - 18:30)

-Conveners: Jos Malda

time	title	presenter
17:30	Engineering in Precision Medicine	KHADEMHOSSEINI, Ali

SYIS Career Panel - Room: S2 (29 Jun 2022, 18:30 - 19:30)

SYIS Night (20:00 - 22:00)

Thursday, 30 June 2022

P3 Plenary Session: Shulamit Levenberg (plenary lecture) - Bioprinting 3D vascularized tissue flaps - Room: S1 (30 Jun 2022, 09:00 - 10:00)

-Conveners: Lorenzo Moroni

time	title	presenter
09:00	Bioprinting 3D vascularized tissue flaps	LEVENBERG, Shulamit

Debate 2: Beyond the promise of Biofabrication: what needs to be done to bring biofabricated substitutes to the clinic? (Prof. Jürgen Groll, Prof. Daniel J Kelly, Prof. Shulamit Levenberg, Prof. Marcy Zenobi-Wong) - Room: S1 (30 Jun 2022, 10:00 - 10:30)

-Conveners: Lorenzo Moroni

time	title	presenter
10:00	Beyond the promise of Biofabrication: what needs to be done to bring biofabricated substitutes to the clinic?	GROLL, Jürgen KELLY, Daniel LEVENBERG, Shulamit ZENOBI-WONG, Marcy

Coffee break & poster (10:30 - 11:00)

S66 Wanted: Dead or Alive? Quantitative microscopy of spheroid and organoid tissues - Room: S4 C (30 Jun 2022, 11:00 - 12:30)

-Conveners: Ruslan I. Dmitriev; Michael Monaghan

time	title	presenter
11:00	Intravital multiphoton and higher harmonic generation microscopy for visualizing cellular processes in cancer and tisseu engineering	WEIGELIN, Bettina
11:20	Non-Invasive classification of macrophage polarisation by 2P-FLIM and machine learning	MONAGHAN, Michael
11:40	MONITORING OF LIVE SPHEROID OXYGENATION USING FLUORESCENCE MICROSCOPY AND NANOSENSORS	OKKELMAN, Irina
12:00	INTEGRATED IMAGING AND MODELLING OF ORGANOID AND SPHEROID MORPHOMETRY USING SMART ALGORITHMS	AHLUWALIA, Arti
12:20	EMT transcriptional response are triggered in response to laser photoablation in 3D models of melanoma	RODRIGUES, Daniel

S10-2 Biofabricated Tissues and Organs for Clinical Impact - Room: S1 (30 Jun 2022, 11:00 - 12:30)

-Conveners: Laura De Laporte; Priscilla Briquez

time	title	presenter
11:00	Weaving a compliant Tissue-Engineered Vascular Graft from Cell-Assembled extracellular Matrix yarn	ROUDIER, Gaëtan
11:10	Exploring shape versatility on all-aqueous processing for cell encapsulation	OLIVEIRA, Mariana B.
11:20	Microfluidic production of immunoprotective enzymatically crosslinked polyethylene glycol-tyramine microgels for beta-cell replacement therapies	ARAÚJO-GOMES, Nuno
11:30	Tissue Engineered Graft from human Adipose-derived Stem Cells for Phalanx Construction in Children with Symbrachydactyly	MOYA, Adrien

11:40	An innovative in vitro gut-on-a-chip model to investigate intestinal microbiota impact on brain functionality	DONNALOJA, Francesca
11:50	Axially vascularized mandibular regeneration, a journey of thousand miles to improve patients' smiles	EWEIDA, Ahmad
12:00	Engineering the Bioartificial Filtration Unit in a Kidney using Polyhydroxyalkanoates	SYED MOHAMED, Syed Mohammad Daniel
12:10	TOWARDS THE DEVELOPMENT OF A GELMA-BASED ORGANOTYPIC HUMAN SKIN MODEL USING A CUSTOM-MADE BIOREACTOR	ELTAYARI, Zahara
12:20	Laser-based subtractive manufacturing for tissue engineering	CRUZ-MOREIRA, Daniela

S05 Additive manufacturing in tissue repair: current status and obstacles toward a daily clinical practice - Room: S4 A (30 Jun 2022, 11:00 - 12:30)

-Conveners: Veronika Hruschka; Mohammad Alkhraisat

time	title	presenter
11:00	Between risk, privacy and magic: regulatory and reimbursement of individual regenerative implants	SEITZ, Daniel
11:20	Medical additive manufacturing: Is it ready for broad clinical use?	MOSCATO, Francesco
11:30	3D BIOPRINTING OF STRUCTURALLY ORGANIZED MENISCUS TISSUE	BARCELÓ, Xavier
11:40	COMPUTATIONAL MODELLING OF MECHANICAL PROPERTIES OF THE SCAFFOLDS PRODUCED BY MELT ELECTROWRITING	ZIELINSKI, Piotr
11:50	Development of an Electroconductive, 3D-Printed Scaffold Designed to Promote Axonal Regrowth After Spinal Cord Injury	LEAHY, Liam M.
12:00	Multi-material 3D printing of ceramics for fabricating bi-phasic implants	SCHWENTENWEIN, Martin
12:10	DESIGN AND EVALUATION OF LATTICE-STRUCTURED MENISCAL IMPLANTS	TUPE, Disha
12:20	Placing a medical devise in the market: a focus perspective on the biological characterization of a medical device	ALKHRAISAT, Mohammad

S39 Injectable composite hydrogels as scaffolds and drug delivery systems for tissue engineering - Room: S2 (30 Jun 2022, 11:00 - 12:30)

-Conveners: Beata Niemczyk-Soczynska; Paweł Sajkiewicz

time	title	presenter
11:00	INJECTABLE AND PHOTOCURABLE AMPHIPHILIC HYBRID NETWORKS: SYNTHESIS APPROACH USING NON-TOXIC CATALYSTS	EL FRAY, Mirosława
11:20	INJECTABLE THERMOSENSITIVE METHYLCELLULOSE/AGAROSE HYDROGEL AS SMART SCAFFOLD FOR TISSUE ENGINEERING APPLICATIONS	NIEMCZYK-SOCZYNSKA, Beata
11:30	ENZYME-CONTROLLED, NUTRITIVE HYDROGEL FOR MESENCHYMAL STROMAL CELL SURVIVAL AND PARACRINE FUNCTIONS	WOSINSKI, Pauline
11:40	ASSESSING EFFICACY OF REGENERATIVE THERAPIES FOR ISCHAEMIC STROKE - A NOVEL APPROACH FOR MORE MEANINGFUL OUTCOMES IN PRECLINICAL MODELS	SAVA, Roxana
11:50	Designing bioinspired medical adhesives from marine biopolymers and Tannic acid	SACRAMENTO, Margarida
12:00	Drug-loaded Alginate microspheres for breast cancer treatment	PITTON, Matteo

12:10	Advanced stem cell therapy for neurodegenerative diseases	SUSANA COSTA MACHADO FERREIRA, Helena
12:20	HA and PRP combinations as “off the shelf“ device for clinical applications	NARDINI, Marta

S60 Tissue engineering and regenerative medicine in Czech Republic - Room: S4 B (30 Jun 2022, 11:00 - 12:30)

-Conveners: Giancarlo Forte; Josef Jaros

time	title	presenter
11:00	The molecular basis of pathological mechanosensing in the failing heart	FORTE, Giancarlo
11:20	Unveiling the molecular basis of pathological mechanosensing to counteract diseases	VINARSKY, Vladimir
11:35	AAV-mediated gene therapy for axon regeneration after spinal cord injury.	JENDELOVA, Pavla
11:50	Generation and Characterization of Human iPSC-derived Cardiac Organoids for Translational Medicine	ERGIR, Ece
12:05	Electrospun silica nanofibres as multifunctional substrate for drug delivery and tissue regeneration	RYSOVÁ, Miroslava
12:20	Production of uniform organoids in microfluidic chips and and the interaction with capillaries	JAROS, Josef

S55 REMODELing the Future: next generation of organoid models for biomedicine - Room: S3 A (30 Jun 2022, 11:00 - 12:30)

-Conveners: Silvia Maria Mihăilă; Marta Alves Da Silva

time	title	presenter
11:00	Bioengineering vascularized microtissues	BARRIAS, Cristina
11:20	TBA	RANGA, Adrian
11:40	Combining cholangiocarcinoma organoids and decellularized liver scaffolds unveils microenvironment-dependent extracellular matrix remodeling	VAN TIENDEREN, Gilles
11:50	Microengineered System to Generate the Functional Inner Ear Organoids with Enhanced Uniformity and Maturity	PARK, Sunho
12:00	Synthetic supramolecular hydrogels for the 3D culture of kidney epithelial cells and intestinal organoids	RIJNS, Laura
12:10	Bile duct on a chip: engineering a microfluidic platform for studying biliary epithelium in a dish	WILLEMSE, Jorke
12:20	Differentially expressed microRNAs during endochondral differentiation of human bone marrow derived mesenchymal stromal cells to identify possible biomarkers for non-union fractures	BREULMANN, Franziska

S52 Perspectives For Future Innovation in Tendon repair (P4 FIT) - Room: S3 B (30 Jun 2022, 11:00 - 12:30)

-Conveners: Giovanna Della Porta ; Nicholas Forsyth

time	title	presenter
11:00	Advances in bioactive materials for tendon repair	BOCCACCINI, Aldo
11:20	Epithelial-to-mesenchymal transition for tendon regenerative medicine strategies	BARBONI, Barbara
11:40	New tools in tendon tissue engineering	GOMES, Manuela E.
12:00	MiRNAs As Potential Regulators Of Enthesis Healing In A Rodent Injury Model	PENICHE SILVA, Carlos Julio

12:10	MULTIMATERIAL AND MULTISCALE SCAFFOLD FOR TENDON/LIGAMENT REGENERATION	MICALIZZI, Simone
12:20	Development of lipid-polymer hybrid nanoparticles for tendon regeneration	LÓPEZ CERDÁ, Sandra

Lunch & Meet the Mentor (12:30 - 13:30)

S53 Prospects and Challenges in Biological Therapies for Tendon Regeneration - Room: S4 B (30 Jun 2022, 13:30 - 15:00)

-Conveners: Manuela E. Gomes; Mohammad El Khatib; Denitsa Denitsa

time	title	presenter
13:30	What influences tendon biology?	WILDEMANN, Britt
13:50	Inflammation – a Core Feature of Tendinopathies	TRAWEGER, Andreas
14:10	INVESTIGATING INFLAMMATION IN TENDINOPATHY: HOW CAN STEM CELLS HELP US?	SMITH, Emily
14:20	MAGNETIC NANOPARTICLE-MEDIATED ORIENTATION OF COLLAGEN HYDROGELS FOR IN VITRO MODELLING AND REGENERATIVE THERAPIES	WRIGHT, Abigail
14:30	Pro-resolving mediators in rotator cuff tendinopathy: how is the bursa involved?	KLATTE-SCHULZ, Franka
14:40	HUMAN 3D TENDON-ON-CHIP MODEL TO INTERROGATE THE MULTICELLULAR CROSSTALK IN TENDINOPATHY	BAKHT, Syeda Mahwish

S57 Supramolecular synthetic scaffolds: from concept to design and application - Room: S2 (30 Jun 2022, 13:30 - 15:00)

-Conveners: Alberto Saiani; Dammy Olayanju; Saurav Ranjan Mohapatra

time	title	presenter
13:30	Supramolecular biomaterials for engineering the cell-material interface – from design to screening	DANKERS, Patricia
13:50	Novel insights into the origin of my-fibroblasts using iPSC derived kidney organoids maintained in user defined self-assembling peptide hydrogels	CREAN, John
14:10	IMPROVED GUANOSINE-BASED BIOINKS FOR SOFT TISSUE RECONSTRUCTIONS	GODOY GALLARDO, Maria
14:20	Where are all the electrospun medical devices? – Case studies of product development from an industry perspective	DUCKWORTH, John
14:30	DEVELOPMENT OF MULTIFUNCTIONAL ANTIMICROBIAL SUPRAMOLECULAR BIOMATERIALS	RIOOL, Martijn
14:40	TISSUE ENGINEERING THE OESOPHAGUS: PROOF-OF-CONCEPT	RAI, Nischal
14:50	DESIGN OF 3D PRINTABLE SUPRAMOLECULAR SELF-ASSEMBLING β-SHEET PEPTIDE-HYALURONIC ACID HYDROGELS WITH IMMUNOMODULATORY PROPERTIES	WYCHOWANIEC, Jacek K.

S26 Combined Korea-EU Symposium: "Bone from fat: Two distinct 17-18 year journeys in bone regeneration with adipose stromal/stem cells" - Room: S4 C (30 Jun 2022, 13:30 - 15:00)

-Conveners: Gunil Im

time	title	presenter

13:30	Bone from fat: Two distinct 17-18 year journeys in bone regeneration with adipose stromal/stem cells	IM, Gunil
13:50	Adipose-derived cells for bone regeneration: Bone (pre)fabrication, developmental engineering and vascularization strategies	SCHERBERICH, Arnaud
14:10	Influence of Dexamethasone on the Interaction Between Glucocorticoid Receptor and SOX9: a Molecular Dynamics Study	STOJCESKI, Filip
14:20	NMR-BASED METABOLOMIC ANALYSIS OF ENDO- AND EXOMETABOLOME ADAPTATIONS THROUGHOUT OSTEOGENIC DIFFERENTIATION OF ADIPOSE-DERIVED MESENCHYMAL STEM CELLS	BISPO, Daniela S. C.
14:30	UNVEILING LIPID METABOLISM UNDERLYING AGING AND OSTEOGENESIS OF MESENCHYMAL STEM CELLS THROUGH 1H-NMR METABOLOMICS	JESUS, Catarina S. H.
14:40	CONVERGENCE OF SCAFFOLD-GUIDED BONE REGENERATION PRINCIPLES AND MICROVASCULAR TISSUE TRANSFER SURGERY	HUTMACHER, Dietmar W.

S65-1 Vascularization for Tissue Engineering and Regenerative Medicine - Room: S1 (30 Jun 2022, 13:30 - 15:00)

-Conveners: Zygmunt Pojda

time	title	presenter
13:30	Therapeutic vascularization in regenerative medicine	BANFI, Andrea
13:50	ENGINEERING HIGH DENSITY CAPILLARY-LIKE NETWORKS USING MICROPOROUS ANNEALED PARTICLE TISSUES	SCHOT, Maik
14:00	SEMAPHORIN3A COUPLES OSTEOGENESIS AND ANGIOGENESIS IN TISSUE-ENGINEERED OSTEOGENIC GRAFTS	GROSSO, Andrea
14:10	A BIOARTIFICIAL FIBRIN-BASED VASCULAR PROSTHESIS WITH A PRE-VASCULARIZED TUNICA ADVENTITIA	ZIPPUSCH, Sarah
14:20	LARGE SCALE FIBRIN-BASED TISSUE CONSTRUCTS SHOW CAPILLARIZATION UPON PERFUSION	ZIPPUSCH, Sarah
14:30	RESET ENDOTHELIAL CELLS PROMOTE FETAL HEPATOCYTE MATURATION IN A 3D ORGANOTYPIC ENVIRONMENT	CACIOLLI, Lorenzo
14:40	THE USE OF HUMAN SKELETAL MUSCLE MICROVASCULAR ENDOTHELIAL CELLS IN SKELETAL MUSCLE TISSUE ENGINEERING: FROM CELL ISOLATION TO IN VITRO PRE-VASCULARIZATION	WÜST, Rebecca
14:50	CELL SHEET-BASED SKIN SUBSTITUTE TO MODULATE VASCULATURE AND INVESTIGATE WOUND-HEALING ASSOCIATED ANGIOGENESIS	MULLER, Laurent

S67 We’ve got your back: the challenges and success of advanced regenerative treatments for intervertebral disc regeneration - Room: S4 A (30 Jun 2022, 13:30 - 15:00)

-Conveners: Marianna Tryfonidou; Lizette Utomo

time	title	presenter
13:30	A biomimetic approach to regenerate a functional NP tissue in the degenerating intervertebral disc.	ITO, Keita
13:50	Development of advanced regenerative approaches for disc degeneration - consideration of the degenerate niche	LE MAITRE, Christine
14:10	TARGETED PROTEOMIC ANALYSIS TO EXPLORE THE ANTI-INFLAMMATORY EFFECTS OF NOTOCHORDAL-CELL DERIVED MATRIX	LAAGLAND, Lisanne

14:20	MODIC CHANGES CORRELATE WITH ENDPLATE AND VERTEBRAL BONE PATHOLOGIES IN DOGS	BACH, Frances
14:30	Directed differentiation of induced pluripotent stem cells to notochordal-like cells by combinatorial transcription factors activation	TONG, Xiaole
14:40	Tuning the Physical Properties of Collagen/Hyaluronan Hydrogels to favor Mesenchymal Stem Cells Differentiation into NP Cells: A Step forwards Intervertebral Disc Regeneration	HELARY, Christophe
14:50	Proteomic characterisation of foetal notochordal cells to inform intervertebral disc development and stem cell differentiation	RICHARDSON, Stephen

S63 Towards automated technologies for organoid-based tissue biomanufacturing - Room: S3 B (30 Jun 2022, 13:30 - 15:00)

-Conveners: Ioannis Papantoniou

time	title	presenter
13:30	Predictive analysis of cardiac microtissue manufacturing by monitoring metabolic CQAs	PALECEK, Sean
13:50	The role of automated bioprocessing within ATMP development and production	DELAHAYE, MIchael
14:10	AUTOMATED MANUFACTURING OF MICROTISSUE BASED OSTEOCHONDRAL IMPLANTS: THE »JOINTPROMISE« PLATFORM	KRIEGER, Judith
14:20	CARTILAGINOUS MICROTISSUES MERGED WITH TAILORED MELT ELECTROWRITTEN MESHES RESULT IN BONE FORMING BIOHYBRIDS	NILSSON HALL, Gabriella
14:30	Laser Assisted Bioprinting for spheroid-based tissue manufacturing	GUILLEMOT, Fabien
14:40	DEVELOPMENT OF A ROBOTICS-DRIVEN BIOMANUFACTURING PROCESS FOR CARTILAGINOUS SPHEROIDS	DECOENE, Isaak
14:50	Stirred culture promotes chondrogenic hypertrophy of cartilaginous microtissues through exposure to intermittent shear stress	LOVERDOU, Niki

S59+S18 The role of multifunctional nanomaterials in new tissue regeneration strategies + Biomedical applications of MXene based next generation nanomaterials - Room: S3 A (30 Jun 2022, 13:30 - 15:00)

-Conveners: Aleksandra Benko; Lucia Gemma Delogu; Sanjiv Dhingra

time	title	presenter
13:30	Nanomedicine: Having External Control of Tissue Engineered Materials After Implantation	WEBSTER, Thomas
13:50	The role of multifunctional nanomaterials in new tissue regeneration strategies	REILLY, Gwendolen
14:10	Carbon nanotubes as effective modulators of cellular reactions in various tissue regeneration strategies	BENKO, Aleksandra
14:20	SPATIALLY RESOLVED MONITORING OF IN VITRO AND IN VIVO DEGRADATION IN CARDIOVASCULAR IN SITU TISSUE ENGINEERING	MARZI, Julia
14:30	SMART TANTALUM CARBIDE MXENE QUANTUM DOTS FOR TREATMENT OF ALLOGRAFT VASCULOPATHY	YAN, Weiang
14:40	AEROSOL-JET PRINTING ENABLES HIGH-RESOLUTION TI3C2 MXENE PRINTED ELECTRODES ON A PTFE STRUCTURE FOR NEURAL STIMULATION	GUTIERREZ GONZALEZ, Javier

14:50	THE IMPACT OF PRIMARY AND SECONDARY FIBERS MORPHOLOGY ON REGENERATIVE AND OPTICAL PROPERTIES OF ELECTROSPUN CORNEA IMPLANT	KURPANIK, Roksana

Coffee break & poster (15:00 - 15:30)

S58 TERMIS-EU SYIS and yESAO joint symposium - Room: S4 C (30 Jun 2022, 15:30 - 17:00)

-Conveners: Yi-tung Lu; Zuzana Koci; Lisanne Laagland

time	title	presenter
15:30	Deciphering endochondral ossification to engineer bone: new opportunities for tissue regeneration and disease modelling	LOLLI, Andrea
15:50	Engineering bioactive surface coatings for programming cell behavior towards osteogenic differentiation	GROTH, Thomas
16:10	Nanoengineered Mechanically Robust Bioactive Particles Disseminated in Chitosan/Collagen Matrix for Osteoporotic Bone Treatment	KAUR, Kulwinder
16:20	The differential response of human macrophages to 3D printed titanium antibacterial implants does not affect the osteogenic differentiation of hMSCs	GARMENDIA URDALLETA, Amaia

S45 Nature bioinspired biomaterials and strategies for TERM - Room: S3 A (30 Jun 2022, 15:30 - 17:00)

-Conveners: Thomas Groth; Nuno Neves

time	title	presenter
15:30	TBA	REIS, Rui
15:50	CONDUCTIVE HYDROGEL NANOCOMPOSITE-BASED NEURAL INTERFACE FOR IN VIVO RECORDING OF BRAIN CORTEX SIGNALS	RINOLDI, Chiara
16:00	Bio-engineering of a Xenogeneic Vascularized Endocrine Pancreas (VEP) for Type 1 Diabetes	CITRO, Antonio
16:10	4D bioprinting of a dynamic multi-material scaffold for in vitro modeling of neural tube development	DE MARIA, Carmelo
16:20	Electrospinning and Metal Stents – A Good Fit?	KANARI, Konstantina
16:30	From protein-based liquified microcapsules to bone tissue micro-units	R. PINHO, Ana
16:40	Curvature-driven cell suturing controls cell organization and tissue formation inside porous biomaterials	HERRERA, Aaron
16:50	ENGINEERING FUNCTIONAL MICROVASCULARIZED SKELETAL MUSCLE TISSUE EQUIVALENTS VIA MICROFLUIDIC-ASSISTED 3D WET-SPINNING AND MICROVASCULAR SEEDS	PRESUTTI, Dario

S21+S44 Biophysical Therapies - External energy to push internal regeneration + Nano Magnetic platforms - an attractive opportunity for advancing TERM products to the clinic - Room: S4 B (30 Jun 2022, 15:30 - 17:00)

-Conveners: Paul Slezak; Peter Dungel; Alicia El Haj; Luminita Labusca

time	title	presenter
15:30	Leveraging Physical Limitations to Expand Shockwave Therapy to Novel Indications	SLEZAK, Cyrill
15:50	ANTIMICROBIAL EFFECTS OF BLUE LIGHT AND RESISTANCE DEVELOPMENT	METZGER, Magdalena
16:00	HUMAN MESENCHYMAL STEM CELLS AND NANOMAGNETIC MATERIALS FOR REGENERATIVE MEDICINE	LABUSCA, Luminita

16:10	A SIMPLIFIED PROTOCOL FOR PREPARATION OF CELL BASED BIOLOGICAL SAMPLES FOR OBSERVING NANOMATERIAL SURFACE ADHERENCE USING SCANNING ELECTRON MICROSCOPY IMAGING	MINUTI, Anca
16:20	Magnetic Nanocarpets based Non-invasive Modulation of Mechanosensitive Ion-channels for Enhanced Osteogenesis	RAJAN UNNITHAN, Afeesh
16:30	Modulating macrophage phenotypes via immune-switch magnetic nanoparticles	ALMEIDA, Ana F.
16:40	Magnetically miRNA-based guidance of macrophage functions	ALMEIDA, Ana F.

S40 Injectable scaffolds in tissue engineering - Room: S2 (30 Jun 2022, 15:30 - 17:00)

-Conveners: Beata Niemczyk-Soczynska; Irene Lara-Saez

time	title	presenter
15:30	Scaffolds for the Delivery of Gene Therapeutics for Enhanced Tissue Repair	O'BRIEN, Fergal
15:50	Injectable hydrogels for joint regeneration	LE VISAGE, Catherine
16:10	LOW-INTENSITY PULSED ULTRASOUND DIRECT CHONDROGENIC DIFFERENTIATION OF ADIPOSE-STROMAL CELLS IN 3D PIEZOELECTRIC HYDROGELS	MANFERDINI, Cristina
16:20	Characterization and molecular imaging of a biohybrid tissue engineered vascular graft	RANJAN MOHAPATRA, Saurav
16:30	Designing injectable peptide-based hydrogels for TERM applications	SAIANI, Alberto
16:40	LIVER-SPECIFIC LIGAND-CONJUGATED MICROPARTICLES FOR TARGETED ISLET TRANSPLANTATION	LEE, I-ning
16:50	An Injectable Hydrogel from a Hydrophobically Modified Collagen for the Encapsulation and Delivery of Fetal Cardiac MSCs	JAMADI KHIABANI, Mahsa

S42 Microphysiological models as powerful preclinical tools - Room: S3 B (30 Jun 2022, 15:30 - 17:00)

-Conveners: Ozlem Yesil-Celiktas

time	title	presenter
15:30	Microengineering 3D perfusion networks for human liver tissue models	LARSEN, Niels B.
15:50	Design and Fabrication of an organ-on-a-chip technology as a physiologically relevant in vitro model of the outer Blood-Retinal Barrier	VOZZI, Giovanni
16:10	A GUT-BRAIN AXIS PLATFORM TO MODEL BRAIN FLUIDS CLEARANCE IN NEUROINFLAMMATION	PEROTTONI, Simone
16:20	PRELIMINARY DEVELOPMENT OF AN IN VITRO 3D IPSC-BASED LIVER MODEL TO EXPLOIT AN INNOVATIVE LIVER-ON-A-CHIP DEVICE	FANIZZA, Francesca
16:30	A MICROFLUIDIC PLATFORM TO INVESTIGATE THE CROSS-TALK BETWEEN IMMUNE CELLS IN RHEUMATOID ARTHRITIS	PALMA, Cecilia
16:40	A tunable lung physiomimetic stretch system evaluated with precision cut lungs slices and recellularized human lung scaffolds	IBÁÑEZ-FONSECA, Arturo
16:50	Spatio-temporal emergence of multicellular engineered structures as preclinical models	YESIL-CELIKTAS, Ozlem

S65-2 Vascularization for Tissue Engineering and Regenerative Medicine - Room: S1 (30 Jun 2022, 15:30 - 17:00)

-Conveners: Arnaud Scherberich

time	title	presenter

15:30	Pro-angiogenic hydrogels from cell-degradable and photo-curable alginate	FERNÁNDEZ-PÉREZ, Julia
15:40	THERAPEUTIC EVALUATION OF α2-ANTIPLASMIN AS A HUMAN-DERIVED SUBSTITUTE TO THE FIBRINOLYSIS INHIBITOR APROTININ IN SURGERY AND REGENERATIVE MEDICINE	BRIQUEZ, Priscilla
15:50	Blood vessel detection algorithm for tissue engineering and quantitative histology	ADAMO, Arianna
16:00	Homing of bone marrow mononuclear cells to axially vascularized tissue engineering constructs	EWEIDA, Ahmad
16:10	THE IMPACT OF ENDOTHELIAL CELL YAP/TAZ ON NEO-ANGIOGENESIS IN BONE HEALING	MEHL, Julia
16:20	HUMAN IPSC BLOOD VESSEL ORGANOIDS AS A SOURCE OF FLOW-ADAPTIVE VASCULAR CELLS FOR TISSUE ENGINEERING OF PERFUSED MACROVASCULAR GRAFTS.	MEIJER, Elana
16:30	THE EFFECT OF CARTILAGE MATURATION AND MINERALISATION ON ANGIOGENESIS DURING ENDOCHONDRAL OSSIFICATION	JI, Encheng
16:40	Towards tissue-specific vascularization of bio-engineered skeletal muscle constructs using autologous skeletal muscle microvascular endothelial cells	TERRIE, Lisanne
16:50	GLUCOSE ENHANCES TRANSPLANTED MESENCHYMAL STROMAL CELLS FUNCTIONS PERTINENT TO ANGIOGENESIS	WOSINSKI, Pauline

S51+S29 Perspectives and Challenges in Bioengineering Dynamic Hydrogels for Regenerative Medicine + Engineered viscoelasticity in cell and tissue engineering - Room: S4 A (30 Jun 2022, 15:30 - 17:00)

-Conveners: Jacek K. Wychowaniec; Aline F. Miller ; João Mano

time	title	presenter
15:30	Dynamic hydrogel design for spatiotemporal control of morphogenesis	BROGUIERE, Nicolas
15:50	Hydrogels that talk to cells when lighted	DEL CAMPO, Aranzazu
16:10	WET-SPUN CORE-SHELL HYDROGEL FIBERS FOR MICROVASCULAR TISSUE ENGINEERING	PARADISO, Alessia
16:20	MICROFLUIDIC SPINNING OF HYDROGEL-BASED CORE-SHELL MICROFIBERS FOR THE FABRICATION OF MYOTENDINOUS TISSUE-LIKE CONSTRUCTS	VOLPI, Marina
16:30	4D Bioprinting of Self-Bending Scaffolds for Articular Cartilage Tissue Engineering Applications	DÍAZ-PAYNO, P.J.
16:40	CLICKABLE DYNAMIC BIOINKS	TOURNIER, Pierre
16:50	Glycopeptide-based supramolecular hydrogels induce differentiation of stem cells into neural lineages	CASTRO, Vânia I. B.

Coffee break & poster (17:00 - 17:30)

FTERM Panel Discussion - Room: S1 (30 Jun 2022, 17:30 - 18:30)

SYIS Green lab Panel Discussion - Room: S2 (30 Jun 2022, 18:30 - 19:30)

TERMIS Dinner (20:00 - 22:00)

Friday, 1 July 2022

P4 Plenary Session: Dietmar W. Hutmacher (plenary lecture): Commentatio historica et philologica - Perspectives and Challenges in Regenerative Medicine - Room: S1 (1 Jul 2022, 09:00 - 10:00)

-Conveners: Manuela E. Gomes

time	title	presenter
09:00	Commentatio historica et philologica - Perspectives and Challenges in Regenerative Medicine	HUTMACHER, Dietmar W.

Debate 3: Perspectives and Challenges of Tissue engineering and Regenerative Medicine (Prof. Dietmar Hutmacher, Prof. Małgorzata Lewandowska-Szumiel, Prof. Rui L. Reis) - Room: S1 (1 Jul 2022, 10:00 - 10:30)

-Conveners: Manuela E. Gomes

time	title	presenter
10:00	Perspectives and Challenges of Tissue engineering and Regenerative Medicine	HUTMACHER, Dietmar W. REIS, Rui L. LEWANDOWSKA-SZUMIEL, Malgorzata

Coffee break (10:30 - 11:00)

S34 Advanced therapy approaches in tissue engineering - Room: S3 A (1 Jul 2022, 11:00 - 12:30)

-Conveners: Irene Lara-Saez; Wenxin Wang; Hector Capella-Monsonis

time	title	presenter
11:00	Non-viral gene delivery platform for topically treating rare genodermatoses	LARA-SAEZ, Irene
11:20	Development of collagen-nanohydroxyapatite scaffold platform for dual-delivery of a microRNA-26a mimic and micoroRNA-133a inhibitor for treatment of large volume bone defects	SADOWSKA, Joanna
11:30	CYSTIC FIBROSIS: REGENERATING LUNG EPITHELIAL CELLS FUNCTION WITH NON-VIRAL GENE THERAPY	MANZANARES SANDOVAL, Dario
11:40	NANOPARTICLE-MEDIATED SELECTIVE SFRP-1 SILENCING ENHANCES BONE DENSITY IN VIVO IN OSTEOPOROTIC MICE BY THE STIMULATION OF THE CANONICAL WNT/β-CATENIN PATHWAY	DIAZ-RODRIGUEZ, Patricia
11:50	MicroRNAs and their role in multiple trauma: profiling local and systemic expression levels	VAN GRIENSVEN, Martijn
12:00	Identification of the best manufacturing condition for clinical grade extracellular vesicles (EVs) secreted by induced pluripotent stem cell-derived mesenchymal stem cells for the treatment of osteoarthritis	GENTILI, Chiara
12:10	A 3D model for the survival niche of human long-lived bone marrow plasma cells	UYAR-AYDIN, Zehra
12:20	OPTIMISING MRNA DELIVERY TO MESENCHYMAL STEM CELLS FOR TISSUE ENGINEERING APPLICATIONS	MCCORMICK, Katie

S50 One health, one medicine: What Veterinary regenerative medicine can teach us - Room: S3 B (1 Jul 2022, 11:00 - 12:30)

-Conveners: Iris Gerner; Debbie Guest

time	title	presenter

11:00	THE UTILTIY OF EQUINE PLURIPOTENT STEM CELLS FOR THERAPEUTIC USE AND DISEASE MODELLING	GUEST, Debbie
11:20	Synovial membrane-derived mesenchymal progenitor cells from osteoarthritic joints in dogs possess lower chondrogenic-, and higher osteogenic capacity compared to normal joints	TEUNISSEN, Michelle
11:30	The cross-talk between the synovial membrane and cartilage in the distracted canine knee joint	TEUNISSEN, Michelle
11:40	Sheep cells as a suitable in vitro tool to evaluate intervertebral disc biotherapies	HUMBERT, Paul
11:50	Phenotypic Characterization of Adipose-Derived MSC based on their Phospholipid Profiles	BURK, Janina
12:00	HOW DO INFLAMMATION, DIFFERENTIATION, AND MHC COMPATIBILITY AFFECT THE IMMUNOGENICITY AND IMMUNOMODULATORY POTENTIAL OF EQUINE MESENCHYMAL STEM CELLS (MSCs)?	CEQUIER SOLER, Alina
12:10	EVs in equine regenerative medicine – challenges and potential therapeutic implications.	GERNER, Iris
12:20	Induction of the senescence phenotype in equine tendon derived cells by dexamethasone	SMITH, Roger K.W.

S46 New developments of regenerative and tissue modeling products - Room: S1 (1 Jul 2022, 11:00 - 12:30)

-Conveners: Xanthippi Chatzistavrou; Faleh Marino

time	title	presenter
11:00	Vat-Polymerization Bioprinting for Tissue Fabrication	ZHANG, Yu Shrike
11:20	Leveraging advances in biomaterials and tissue engineering for reparative, regenerative and tissue modelling solutions	ASHAMMAKHI, Nureddin
11:40	A VOCAL WORKOUT: NOVEL BIOREACTOR FOR THE IN VITRO CULTURE OF VOCAL FOLD REPLACEMENT TISSUES	LUENGEN, Anja E.
11:50	Can oral mucosa be used in primary hypospadias surgery in prepubertal boys?	DE GRAAF, Petra
12:00	BIOENGINEERING A NOVEL UV-INDUCED SKIN MODEL TO MIMIC THE EFFECT OF ENVIRONMENTAL STRESSORS EXPOSURE ON SKIN HEALTH	DE LOS SANTOS GOMEZ, Paola
12:10	NEW HYBRID HYDROGELS FOR APPLICATIONS AS BIOINKS IN 3D PRINTING IMPLANTS	CHATZISTAVROU, Xanthippi
12:20	CLAY BASED STRUCTURED GELS FOR CONTROLLED DELIVERY OF VASCULAR ENDOTHELIAL GROWTH FACTOR	DAWSON, Jonathan

S54+S14 Regulation of cell phenotype in osteochondral tissues: towards RNA therapy for bone and cartilage repair + Biological testing of 3D-printed biomaterials – towards updated norms - Room: S2 (1 Jul 2022, 11:00 - 12:30)

-Conveners: Eric Farrell; Andrea Lolli; Veronika Hruschka; Daniel Seitz; Marley Dewey

time	title	presenter
11:00	Cartilage and bone regulation by microRNAs	YOUNG, David
11:20	mRNA therapeutics for musculoskeletal tissue healing	ROSADO BALMAYOR, Elizabeth
11:40	CHROMATIN COMPACTION DECREASES CELL ADHESION STRENGTH: AN ANALYSIS BY FLUIDIC FORCE MICROSCOPY	BUISSON, Julie

11:50	Improving chondrogenic potential of mesenchymal stromal cells by siRNA delivery in hydrogels.	DELLA BELLA, Elena
12:00	3D Printing Of Sol-Gel Silica-Based Hybrids For Bone Regeneration	RODRIGUEZ-GONZALEZ, Raquel

S35+S36 Giving meaning to early tissue damage responses in regeneration + Glycomodulation Approaches in Tissue Engineering - Room: S4 A (1 Jul 2022, 11:00 - 12:30)

-Conveners: Johannes Grillari; Heinz Redl; Laura Russo; Abhay Pandit

time	title	presenter
11:00	The Zone of Tissue Activation Delineates Immediate and Long-Term Response of Skin to Wounding and Associates with Markers of Senescence and Regeneration	OGRODNIK, Mikolaj
11:20	Endogenous Bioelectric controls of growth and form	MICHAEL, Levin
11:40	Using Supramolecular Biomaterials to Interrogate and Manipulate Galectin-Glycan Interactions	HUDALLA, Greg
12:00	ENHANCING TISSUE REGENERATION BY DELIVERING AN ENGINEERED TREG-DERIVED FACTOR	PIOTTO, Celeste
12:10	ELASTIN-LIKE-RECOMBINAMER CRYOGEL WITH RECOMBINANT GLYCOSAMINOGLYCANS AS A MODULAR PLATFORM FOR REGENERATION	SÖDERLUND, Zackarias
12:20	Guided bone regeneration in osteoporosis by plant-derived nanoparticles	GURZAWSKA-COMIS, Katarzyna

S61 Tissue Engineering in Microgravity for Health in Space and on Earth - Room: S4 B (1 Jul 2022, 11:00 - 12:30)

-Conveners: Jeremy Teo

time	title	presenter
11:00	Tissue Density Diminishes the Effects of Simulated Microgravity on Dendritic Cell Immune Potency in vitro	TEO, Jeremy
11:10	3D microenvironment maintains the transcriptome profile of T cells but not B cells in simulated microgravity	ELGINDI, Mei
11:20	Studies of cellular differentiation in simulated microgravity reveal an important role for β-actin in mechanosensing	SAPKOTA, Oscar

Closing Session and Awards - Room: S1 (1 Jul 2022, 12:30 - 13:30)