

	YSF Workshop
	Part I: Name
	Lecture
	Lecture
	Lecture
14:00–16:00	Part II: Name
	Lecture
	Lecture
	Lecture
	<i>Roundtable with open discussion</i>
16:00–17:45	Break
17:45–18:45	Plenary lecture: John A. Rogers
18:45–19:15	Opening Remarks
19:30–22:00	Welcome Reception

QEH	Okapi room 2	Okapi room 3	Gorilla room 1	Gorilla room 3	Gorilla room 4	Darwin Hall
Biomaterials for Bone and Cartilage Regeneration	3D printing photopolymerization at micro- and nanoscale design of devices and materials for bioapplications	Biomaterials for Wound Healing Opportunities and Challenges to Solve Clinical Needs	Controlled and Sustained Release Technologies	New Horizons in Antimicrobial Surfaces	Innovative strategies to integrate gasotransmitters and signalling molecules into biomaterials for therapeutic action	Polymeric Biomaterials – Natural
João Mano	Emanuela Jacchetti & Silvia Santoni	Nora Ventosa & Judit Tomsen-Melero	Daniel Kelly	Merve Kübra Aktan & Cristina Balagna	Julieta Paez & Deepa Deepa	Yuichi Ohya
Marcy Zenobi-Wong	Emanuele Mauri	Fiorenza Rancan	Luiz Henrique	Artemis Stamboulis	Marcelo Ganzarolli de Oliveira	Chiara Schiraldi
Young Kim - Catechol-coacervate stabilizes extracellular vesicles for metal-coordinated hydroxyapatite bone putty	Benjamin Kruppke - Combining 2-photon-polymerization with microfluidic on-Chip setups for complex multicompartment scaffolds as osteochondral tissue model	Marta Alcaina-Hernando - New plant-based nanovesicles based on alkyl polyglucosides surfactants and β -sitosterol as topical drug delivery systems	Nunzia Gallo - Collagen microspheres for localized antiinflammatory delivery in chronic skin lesions	Hitesh Handa - Surface engineering of blood-contracting devices with slippery, nitric oxide-releasing interfaces	Deepa Deepa - Design and optimization of nitric oxide (NO) releasing hybrid supramolecular hydrogels for cardiovascular applications	Assunta Borzacchiello - Design of chitosan and hyaluronic acid nanoparticles able to overcome the mucus barrier for the treatment of lung infections
Junyi Song - The promoting effect of Balanus albicostatus cement protein 19k (Balcp19k)	Giovanni Bucciolli - A 3D microstructured scaffold reveals the mechanobiology of cancer Multi-Drug Resistance	Elba Guasch García - Multifunctional Quatsome-based nanomedicines: A versatile platform for protected biomolecule delivery and advanced wound care	Cristina Casadidio - Tunable Hyaluronic Acid-Based Injectable Hydrogels for Sustained and Bioactive Delivery of Sodium Channel Blockers in Neuropathic Pain	Anindiyasundar Adak - Immobilisation of novel antimicrobial peptides on titanium alloy surfaces enhances antibacterial activity	Eronildo Alves Pinto Junior - Nitric Oxide Release from S-Nitrosoglutathione Preserves Vasodilation and Reduces Infarct Size After Myocardial Ischemia-Reperfusion	Manon Minsart - Multifunctional antioxidant hybrid hydrogels containing cerium oxide nanocrystals for accelerated wound healing
Kamila Walczak - Biomimetic modification of hyaluronic acid – adipic acid hydrazide hydrogels with chondroitin sulfate and collagen	Maria Puertas-Bartolomé - Thermoresponsive granular bioinks based on Elastin-Like Recombinamers	Paula Pleguezuelos Beltrán - A bioactive three-layered ECM-based hydrogel for enhanced wound healing and skin regeneration	Sana Ahmed - Hydrogels mediated delivery of human serum albumin enhances penetration and uptake in Liver spheroid Model	Michele Iafisco - Bioinspired Calcium Phosphate Nanoneedle Arrays as Antibacterial Surfaces for Infection-Resistant Bone Grafts	Leticia Bazílio Rosa - Nitric Oxide-Releasing Methacrylated Pluronic Hydrogels for Antileishmanian Therapy	Goutam Thakur - Nano-emulsion-based Kappa-Carrageenan Hydrogels: A Platform for the Release of Hydrophobic Drugs
08:15–9:45 Kim Nora Wagner - Microfluidic Wet-Spinning of Aligned Collagen-GAG Fibers for Cartilage Repair	Cristina Cortesi - Evaluation of scaffold-induced immune response in chicken embryo chorioallantoic membrane studies	Rossella Laurano - Beyond traditional wound dressings: glucose-responsive poly(ether urethane)-based patches patient-personalized through AI- and XR-technologies	Carla Sardo - Green-Synthesized MnO ₂ @INU-g-bPEI Nanoparticles for Layer-by-Layer siRNA Delivery and MRI-Guided Theranostics	Lydie Ploux - Cohesion and mechanical stability of biofilms compromised by small molecules with aromatic residue through disassembly and inhibition of functional amyloids	Amir Abdo - Gasotransmitter-Modulating MOF Nanoparticles for Immunometabolic Reprogramming in Triple-Negative Breast Cancer	Rupert Kargl - Protease catalyzed cross-linking of peptide grafted alginate chains
Aezoo Ashrafnia Menarbazari - Mechanically induced bactericidal effects of nanostructured hydroxyapatite and titanium surfaces under static and dynamic conditions for bone tissue engineering	Silvia Santoni - Scaling up microscale architectures for 2PP bioprinting applications	Pedro Luis Echevarria-Torres - Cannabidiol-Loaded PLGA Nanoparticles prepared by microfluidics for Burn Wound Treatment	Matteo Nifosi - Proteinosomes as a delivery system to enhance hydrogel scaffold bioactivity in tissue engineering applications	Emilie Groult - Antimicrobial Peptide Functionalization of High-Entropy Alloy Surfaces for Infection-Resistant Osteosynthesis Implants	Veerle Boterberg - Insights into S-Nitrosothiol Decomposition: S-Nitroso-N-Acetylcysteine as a Model for the Design of Next-Generation NO• Releasing Wound-Care Materials	Sripany Promnil - Tensile properties of single- and multi-type mixed fibre bundles of spider silk
Himanshi Diwan - Mineralized Himalayan Sheep Wool Based Composite 3D Printed Scaffolds with Curcumin for Osteosarcoma Management	Salvatore Luigi Carlucci - Design of Bio-Based Photocurable Non-Isoyanate Polyurethanes for Two-Photon Polymerization 3D Printing of Biocompatible Microstructures	Anna Baran - SCOPY nanocellulose dressings enriched with L-carnosine for chronic wound care	Husam Younes - Biodegradable photocrosslinked elastomer platforms for sustained intraocular delivery of therapeutic antibodies	Charles Brooker - Light-Activated Photodynamic Polymer Biomaterials as Antibiotic-Independent Strategies to Combat Antimicrobial Resistance	Roman Major - Structure–property–function relationships of hydrogen- and nitrogen-modified titanium–amorphous carbon coatings for blood-contacting applications	Adivrit Mukherjee - A mechanically programmable hydrogel platform for probing mechanotransduction during plant protoplast regeneration
Miryang Klink - Albucol: UVA/Riboflavin-stabilized Albumin-Collagen Composite Scaffold Enabling Vascularized Bone Organoid Formation	Eugenia Spessot - Bioprinted silk fibroin-based auxetic metamaterials as platform for modeling cardiovascular diseases	Juliana de Souza Nunes - Multifunctional 3D Printable Biomaterials for Enhanced Wound Repair	Dana Kubies - Polyelectrolyte complexes as nanocarriers for growth factors	Giovanni Lo Bello - Enzyme-functionalized and quercetin-loaded star-shaped PCL nanoparticles for enhanced biofilm removal in clinical Staphylococcus aureus isolates: an AFM quantification study	Monica Echeverry Rendón - Influence of plasma electrolytic oxidation coatings on the corrosion resistance and biocompatibility of biodegradable Mg and Zn-based materials	Joana Catarina Moreira - 3D ZnO Tetrapod-Based PLLA Biocomposite Films as Potential Antimicrobial Food Packaging Materials
9:45–10:15 10:15–11:00	Coffee break & Poster Session					
George Winter Award: Manuel Salmeron-Sanchez (chaired by Cristina Barrias)						
QEH	Okapi room 2	Okapi room 3	Gorilla room 1	Gorilla room 3	Gorilla room 4	Darwin Hall
Dynamic Supramolecular Biomaterials for Regenerative Medicine	4D Printing and Smart Biomaterials for Regenerative Medicine	Hydrogel Fibre Composites for Enhanced Functionality in Engineered Tissues	Converging Towards Mechano-Transduction in Bone Cartilage Interface	Next-Generation Biomaterials and Bioengineering Strategies against Antimicrobial Resistance Development	Functional and Biodegradable Nanomaterials Innovations and Nanotoxicological Insights from Alternative Models	Polymeric Biomaterials – Synthetic
Julieta Paez & Stefan Mommer (chair) & Dominik Schauenburg (co-chair)	Maria Grazia Raucci	Kenny Dalgarno & Maria Teixeira (co-chair)	Jose Carlos Rodriguez Cabello & Malgorzata Gazinska (co-chair)	Bikramjit Basu & Sanjukta Deb & Annabel Braem	Gianni Ciofani & Alessio Carmignani	Chiara Schiraldi
João Borges	Mohammad Mirzaali	Carmen Freire	Daniel Kelly	Christophe Drouet	Ernesto Alfaro-Moreno	Yuichi Ohya
Gianluca Ciardelli	Cristina Martin Jimenez - From biodegradation to "smart" hydrogels: graphene derivatives for biomedical applications	Irem Unalan - Melt Electrowritten Fiber Reinforcement of OHA-GEL Hydrogels Enables Tunable Neural Microenvironments	Bruno Ladeira - Clarifying the contributions of time and strain dependent mechanical dynamics toward the determination of cell fate in human-derived scaffolds	Martina Zabcic - Contact-Based Functionalized Gold Nanoparticles for Broad-Spectrum Antimicrobial Activity	Ana Beloqui Elizazu	
Neha Thakur - Dynamic Nucleic Acid Bioengineered 3D Scaffolds for Cell Culture Applications	Lorenzo Bonetti - Optimizing NaOH treatment of 4D printed PCL networks: trade-off between biological, mechanical, and shape-memory performance	Anna Laromaine - From Nanofibrils to Scaffolds: Bacterial Cellulose as a Structural Reinforcement for Hydrogels	Sanne van de Loij - Toward rational design: How hydrogel characteristics drive the biomechanical response and matrix deposition of encapsulated chondrocytes	Elizabeth Brisbois - Photoactivated Nitric Oxide Delivery from Polymeric Materials to Inhibit Device-Related Infections	Aitor Larrañaga - Fucoidan-functionalized multilayer nanoparticles for targeting activated endothelial cells	Jonasz Czajkowski - Biological assessment of azithromycin-loaded poly(sebacic acid) microparticles for lung delivery: antimicrobial efficacy and response in S. aureus-epithelial cell coculture model

11:00-12:30

Shima Kalantarifard - Multifunctional β -Cyclodextrin Polymer Platform for Drug Delivery and Supramolecular Hydrogels in Cartilage Repair	Mariola Cano Morenilla-NeoNectin-functionalized 3D-printed polymeric stents promote endothelialisation and reduce thrombogenicity	Salomé Luis - Electrically conductive and magnetic microfluidic-spun fiber-laden hydrogels for muscle tissue engineering	Nikita Pahrurkar - DLP bioprinted functionally graded SFMA- κ -carrageenan-TCP scaffolds with selective barrier properties for guided bone regeneration	Xiaoju Wang - Sustainable lignin nanoparticles empowered by gallate-oriented surface chemistry engineering for targeted antibacterial activity	Alessio Carmignani - Cell Membrane-Coated Polydopamine Nanoparticles for Photothermal Therapy against Glioblastoma	Lucas Lemarié - Thermosensitive and photocrosslinkable PVA-PEG hydrogel as a synthetic alternative to Matrigel for organoid culture
Annalisa Perioti - Supramolecular Glycopeptide-based Nanoparticles for the Controlled Delivery of Perinatal Stem Cells' Secretome for Cardiac Repair	Monica Sandri - Tailoring Bone mimetic matrices: nanocomposite injectable formulations and 3D printing for personalized therapies and tissue regeneration	Fatma Ozdemir Steedman - A 3D co-cultured hydrogel-fibre cardiac perfusion model	Małgorzata Gazińska - Engineering poly(glycerol adipate)-based elastomeric biomaterials for tissue regeneration	Albert Ruiz Sorribas - Fighting bacterial colonization of hydroxyapatite: the role of nanotopography and plasma-treated liquids	Maria Andrea Castillo Bohorquez - An ultra-low volume platform to screen biocompatible nanoparticles with DNA, mRNA and pDNA for gene delivery	Paula Soares - Development of a dual-stimuli responsive system for on-demand drug delivery and magnetic hyperthermia

12:30-14:00

QEH	Okapi room 2	Okapi room 3	Gorilla room 1	Gorilla room 3	Gorilla room 4	Darwin Hall
Paola Grillo Coppola - Engineered Supramolecular Hydrogels with Tunable Self-Healing for Embedded Bioprinting Applications	Camille Bonhomme - AddGraft: a biocompatible and versatile additive for light-based 3D patterning within crosslinked hydrogel networks.	Elham Sharifikolouei - Hydrogel-metallic microfiber/nanowire composites to improve electrical bridging in conductive soft cardiac patches for synchronized beating of iPSC-derived cardiomyocytes	Anna Puiggali Jou - Decoupling Bone and Cartilage: Biphasic Biofabrication of the Osteochondral Unit Using Wild-Type and RUNX2 KO Human MSCs	Lea Dierker - Antimicrobial Fibrinogen Nanofiber Scaffolds via Nanoparticle Integration	Jessica Hollett - Evaluating Cytotoxicity of Fibrous and Hydrogel Biomaterials to Inform Scaffold Design for Conjunctival Repair	Catherine Noonan - Thiol-yne Mediated Covalent Conjugation-Induced Self-Assembly for Multiscale Polymeric Biomaterials
Sergio Spaans - Optimizing viscosity and dynamics of alginate-based fibers to enhance bovine muscle generation for cultivated meat	Agnieszka Piontek - Self-Rolling Vascular Scaffolds Fabricated via Combined Melt Electrowriting and Melt Electrospinning	Joao P F Carvalho - Designing conductive hydrogel-based bioinks with polysaccharides and metal-protein nanohybrids for the 3D bioprinting of cardiac tissue platforms	Elisa Migliorini - Decoupling mechanical and biochemical cues in 3D cell culture using biomimetic adaptable materials	Anna Górska-Ratusznik - Nano-Boosted Antibiotic Therapy: Chitosan-Cyclodextrin Nanoparticles for Diabetic Foot Treatment	Binnur Aydogan Temel - Development of tacrine and gallic acid conjugated nanotherapeutics for Alzheimer's disease	Giulia Auriemma - 3D-printed PCL/INU-PLA scaffolds enabling bulk and surface in situ MnO ₂ functionalization as multifunctional bone biomaterials
	Conrado Ramos Moreira Afonso - Ultrasonic Atomization of Multiprincipal Beta Ti-Nb-Ta-Zr alloys powders for Laser 3D Printing	Daniel Pint - Cellulose Supported 3D Printing: Unlocking Complex, Anisotropic Hydrogel Structures for Biomimetic Aorta Models	Marija Vukomanovic - *organizer but also oral presentation	Kocer Zeynep - The effect of hierarchical wrinkled surfaces on controlled bacterial adhesion		

12:30-14:00

QEH	Okapi room 2	Okapi room 3	Gorilla room 1	Gorilla room 3	Gorilla room 4	Darwin Hall
Lunch						
Lunch						

12:30-14:00

QEH	Okapi room 2	Okapi room 3	Gorilla room 1	Gorilla room 3	Gorilla room 4	Darwin Hall
Biomaterials & Bioprinting Powering the Next Generation of Organs-on-Chip (In collaboration with the International MPS Society)MPSS)	4D tissue engineering widening the control over cell's microenvironment	Computational Modeling, Digital Twins, and In Silico Testing	Biomaterials and the Immune System	Piezoelectric Biomaterials From Design to Functional Interfaces in Tissue Engineering	Current concepts in orthopaedic device-related infection	Biofabrication of complex tissues and models using functional biomaterials
Gianluca Ciardelli & Ana Mora Boza (co-chair)	Rui M. A. Domingues & Simão P. B. Teixeira (co-chair)	Carmen Freire	Mohamed Elsayw & Desiré Venegas Bustos (co-chair)	Carlotta Pucci & Lorenzo Vannozzi (co-chair)	Britt Wildemann & Geoff Richards (co-chair)	Yanghee Kim & Maria ChatziniKolaidou (chair) & Giantuca Cidonio & Khoon Lim (co-chair)
Lorenzo Moroni	Miguel Castilho	Hayden Taylor	Veronica Doderò	Thanh D. Nguyen	Matteo D' Este	Byoung Soo Kim (1376)
Farhad Sanaei - Engineering a modular, perfusable bone-on-chip system by leveraging granular hydrogel design	Masayuki Tera - Chemical 4D reconstruction of extracellular matrices using ion-pair-engineered click hydrogels	Saba Kamaliast - Morphology-aware machine learning framework for predicting nanoparticle transfection efficiency across cell types	Thomas Green - Laser surface texturing of bulk metallic glass promotes protein adsorption and tissue-regenerative macrophage phenotypes	Susanne Staehle - Piezoelectric KNN Ceramics: Synthesis-Driven Optimization for Enhanced Osteoblast Response	Fintan Moriarty	Giovanni Vozzi (1369)
Andrea Bezze - Microfluidic Neurovascular Microenvironments for High Throughput Benchmarking of Emerging Nanotherapies	Ryan - Mechanistic Modelling and Experimental Validation of a Biocompatible and Biodegradable 3D IPMC Actuator	Eleni Papafilippou - Mechanical Diversity of Binding Interactions Improves Robustness in Soft Biomaterials	Elena Amaro Prellezo - Bioprinted Hyaluronic acid/gelatin hydrogel 3D model for studying extracellular histone effects in sepsis-related renal injury	Diego Trucco - Cell-specific Activation of Cytoskeleton Regulators and Voltage-Gated Ion Channels Mediated by Piezoelectric KO.8Na0.2NbO3 Nanoparticles and Low-Intensity Pulsed Ultrasound	Matteo D'Este - Soft biomaterials for antibiotic delivery: a design journey guided by surgical practice	Sofia Avnet - Engineering a 3D model of bone metastasis with citrate-functionalized hydroxyapatite nanocrystals and microfluidics to investigate the role of citrate in prostate cancer progression
Carlotta Mattioda - A Multicompartment Vascularized Melanoma-on-a-Chip: Recapitulating the Tumour Microenvironment and Metastatic Potential	Arpita Roychoudhury - Biocompatibility and precision in xolography-based bioprinting: validation of new additives across broad range of cell types	Behafarid Ghalandari - De novo discovery of LLPS-prone short peptides: Mechanistically interpretable generative modelling and coarse-grained molecular dynamics	Shue Jin - M2 macrophage-derived exosome-functionalized fibrous scaffolds regulate the foreign body response and the coupling of angio/osteoclasto/osteogenesis	Paula Rodriguez Lejarraga - Active tuning of protein distribution and conformation on magnetoactive composites	Rita Gomes - Development of proppolis-loaded alginate dry hydrogels with antibacterial properties for osteomyelitis treatment	Mauro Di Stasi - will come soon

14:00-15:30

Federico Farina - Alveoley – an alveoli-on-a-chip model to recapitulate lung microarchitecture	Tom van Hatterm - Engineered mechanical heterogeneity through light-sheet grayscale volumetric bioprinting enables spatial and temporal control of cellular fate	Siwi Setya Utami - Engineering Cell-Derived ECM Bioinks with Enhanced Printability and Bioactivity	Ana Beatriz Sousa - Dual-Action Fibrin Hydrogels Enhance Macrophage Polarisation and Angiogenesis to Support Regenerative Healing	Matteo Sestini - Multiscale modeling of PVDF piezoelectric ultrafine fiber meshes for cochlear applications	Mohammad Ibrahim - Localised Corrosion and Mechanical Degradation in Clinically Used Bone Rasps	Baghdasaryan Lilit - Development and in vitro evaluation of 3D-printed biodegradable hydroxyapatite bioscaffolds
Alice Salvadori - Organotypic laser-patterned microvasculature for a perfusable liver-on-chip model	Laurens Parmentier - A delayed dissolution, digital light processing bioprinting approach towards vascularized osteogenesis	Vincent Biscaccianti - Gyroid printing using robocasting for bone regeneration: influence of induced anisotropy on printability and mechanical properties.	Jacek Wychowaniec - Chirality-programmed self assembling peptides fine tune macrophage inflammation revealed by targeted secretomics	Silvia Marino - Auxetic cardiac patches combining mechanical support and piezoelectric stimulation for myocardial repair	Domonkos Tolnai - Development of Mg-Y-Zn based alloys for orthopaedic staple applications	Adrian Perez Barreto - From avascular constructs to living tissues: engineering vascularized bioprinted skin
Simon Sayer - A versatile 3D printed platform for the assembly and perfusion of breast tumor cell clusters	Minaine Bouabdallah - Ice-templated IL-2 loaded collagen matrices mimic regulatory T cells tissue microenvironment	Alberto Bocconi - Multiphysics computational model of doxorubicin diffusion in scaffold-engineered fibrotic tumor microenvironments within an avian CAM model	Jeremy Teo - The Architecture of Exclusion: Collagen Fibril Alignment as a Mechanical Regulator of Immune Dysfunction	João Silva - 3D-Printed Piezoelectric Scaffolds Coupled with Ultrasound Stimulation Synergistically Promote the Osteogenic Differentiation of Mesenchymal Stem Cells for Bone Tissue Engineering	Matteo Montesissa - Marine Waste Shells as New Biomaterials for Orthopaedic Application: Eco-friendly Conversion Route to obtain Green Hydroxyapatite and Nanostructured Coatings	Emrys Thursfield - Collagen substrates allow independent control over physical properties and biological functionality for in-vitro culture of renal primary cells
Soumaila CISSE - Engineering a bioactive and mechanically tunable vein-on-a-chip for real-time investigation of unexplained thrombosis	Anna Finne-Wistrand - Design heterogeneous microenvironments via light-directed biochemical and mechanical patterning of HA hydrogels	Sergio Puértolas - Patient-specific screw and plate configuration design for femoral fractures: A digital twins and machine learning approach		Dabin Kim - Remotely and non-invasively activated piezoelectric scaffolds for electromechanical tissue regeneration		
Klaas De Groot Award: Abhay Pandit (chaired by Matteo D'Este)						
Coffee break & Poster Session						
YSF General Assembly						

15:30-16:15

16:15-16:45

16:45-17:30

QEH	Okapi room 2	Okapi room 3	Gorilla room 1	Gorilla room 3	Gorilla room 4	Darwin Hall
Biofabrication using photoactivated materials	Advanced Manufacturing and Functionalization Strategies for Next-Generation Biomaterials	RSC Biomaterials Chemistry Interest Group Symposium Injectable Hydrogels for TERM Applications	Biomimetic Horizons: Engineering advanced ES constructs	Bioactive Coatings and Electrophoretic Deposition From Design to Biomedical Applications	Current Advancements in Oral, Dental and Craniofacial Tissue Regeneration	Biomaterials for Drug Delivery Systems
Christopher Moser & Viola Sgarmino (co-chair)	Miguel Castilho	Jacek Wychowaniec & Ian Hamley (co-chair)	Farnaz Ghorbani & Lorenzo Moroni (co-chair)	Lina Altomare & Cláudia S Oliveira (chairs) & Merve Kübra Aktan & Irina Negut (co-chairs)	Annelies Bronckaers & Mariano N Simon Pedano De Piere (co-chair)	Giovanni Vozzi
Riccardo Rizzo	Liam Grover	Chris Sammon	Teodor-Matei Cirstea	Aldo R. Boccaccini	Marco Bottino	Robert Luxenhofer
Emine Durukan - Peptide-encapsulated 3D bioprintable hydrogels for bone tissue engineering: in-vitro evaluations	Tas Roderick - TiLuminate: Illuminating the surface of titanium implants with fluorescence microscopy.	Mirosława El Fray - New injectable composites featuring dual responsiveness for trabecular bone repair	Felipe Martinez-Ramirez - Polydopamine-functionalized electrospun PCL/PLA/PEG scaffolds for sustained biomolecule delivery in advanced wound	Irina Negut	Christina Sari - Composite insect-chitosan/ β -TCP/silk fibroin hydrogels for enhanced osseointegration on dental implants	Tara Shekari - Niosomal film-forming gel for topical delivery of colchicine: formulation, characterization, and controlled release performance
Isabel Hui - Macroporous Mineralizing Photosens for Bone Tissue Engineering	Ibáñez Losantos Sergio - Implementation of PCL/AgNPs electrospun coatings onto Ti6Al4V additive manufactured samples with biomedical applications	Parisa Torabi-Rahvar - Injectable Hyaluronic Acid/Collagen Type II/Silk Fibroin Composite Hydrogels for Mechanically Reinforced Nucleus Pulposus Regeneration under Dynamic Loading	Arn Mignon - Electrospinning a mechanocompatible external support for the Ross procedure	Mehmet Kerem Citak - Electrophoretic deposition of epidermal-inspired collagen films for wound healing	Annelies Bronckaerts -	Roa Bouhamad - Elaboration of photothermal hydrogels triggering the release of therapeutics from connected wound dressings
Joanna Babilotte - Methacrylated Pluronic (PluMA) hydrogels for high-resolution 3D printing and biofabrication	Terezinha Santos da Cruz Juliana - Influence of chemical treatments on the density and surface morphology of sisal fibers for application in polymeric composites	Roberta Pappalardo - Design of customized injectable hydrogels relying on Schiff-base and supramolecular interactions as potential antibiotic-free therapeutic platforms	Lorenzo Vannozi - Programmable skeletal muscle organization using MEW-patterned thin films	Lina Altomare - Electrophoretic Deposition as a One-Pot Strategy to Fabricate Multifunctional Chitosan Patches Embedding Alginate Microspheres for Drug and Cell Delivery	Büşra Şenel Demirtaş - From Spheroids to Macro Tissues: Vasculogenic Potential of DPSC Spheroids for Dental Pulp Tissue Engineering	Julien Dartus - Design and preclinical-clinical evaluation of drug-eluting osteosynthesis plates for the prevention of bone infections
Federico Sinnona - Light-Activated Hydrogel Systems for Engineering Perfusible Renal Models	Velayudhan Shiny - Process Design for Large-Scale Manufacturing of Microneedle Arrays	Artemijs Scegljovs - Resistance-suppressing antibacterial c-polylysine/hyaluronic acid injectable hydrogels for treating wound infections	Matteo Sestini - Manufacturing of Bioartificial Eardrum Replacements for Middle Ear Surgery	Ena Athenea Aguilar-Reyes - Bioactive glass coatings improve osteogenic performance of highly porous titanium carbide scaffolds	Xiyu Li - Bioengineered HA-Internalizing Osteoblasts and Osteonectin Synergistically Boost Bone Regeneration	Zhen-Kai Lin - Eliciting systemic antitumor immunity and remodeling the microenvironment with a dual-targeting in situ nanovaccine
Charlotte Brice - Ultrafast volumetric bioprinting enables precise morphological control of perfusable stem cell-derived microphysiological endocrine pancreatic units	Paredes Virginia - Biochemical transformations during chitosan extraction from crab anatomical fractions revealed by FTIR spectroscopy	Vahid Shafiei - Multifunctional injectable silk-based hybrid hydrogel enabling localized hydrogen-assisted osteosarcoma therapy and subsequent bone defect repair	Jef Brebels - Beyond Poly(ϵ -caprolactone): Poly(ester amide) Scaffolds Fabricated by Electrospinning and Melt Electrowriting for Flexor Tendon Repair	Mathilde Hindie - Sono-Electrodeposited CaP-Sr Coatings on Carbon Cloth for Bone Repair	Athanasios Alexandridis - Design and Processing of UV-Curable Calcium Phosphate Inks for Direct Ink Writing of Tooth Root Scaffolds	Yasuhiro Iwasaki - Estrogen-embedded bone-seeking polymers to inhibit osteoporotic bone resorption

17:30-19:00

Rebecca Downs-Ford - An Immunocompetent Bioprinted Dextran-Based Skin Model for Studying Chronic Wound Inflammation	Yadav Deepesh - Evaluating Methodological Impacts on the Mechanical Properties of Reinforced Ecoflex Designed to Mimic Porcine Aorta	Raghad Abuhamdan - Injectable Multifunctional Nanoengineered Strontium-Based Laponite® Hydrogels Accelerates Bone Regeneration via Favorable Physicochemical Properties and Promoting Osteo-/Anticlastogenic Effects	Jana Ghitman - Graphene oxide-decorated electrospun architectures for macrophage gene delivery	Sumit Murab - Hydroxyapatite Nanospicule Coating on 3D Printed PLA Scaffolds with Bactericidal Activity for Bone Regeneration	Alessia Lo Re - In Situ Photocrosslinked Thiol-Ene/Dithiolane Nanocomposite Hydrogels Based on modified-Hyaluronic Acid and Dendritic Polymer for Bone Regeneration	Urszula - Tunable Thermosensitive Chitosan/ β -Glycerophosphate Hydrogels for Local Irinotecan Delivery
Laura Valenzuela Segura - Light-Activated Mechanostimulation of hiPSC-Derived Cardiomyocyte Microtissues using a 4D Printed Hybrid scaffold	Florian Wieland - Impact of Degradation and Strain on the Fatigue of degradable Magnesium		Ahmed El-Fiqi - Angioinductive Electrospun Nanocomposite Nanofiber Membrane for Soft Tissue Regeneration: Physicochemical, Mechanical and In Vitro/In Vivo Evaluations		Prarthana Mistry - PolyHIPEs Scaffolds for MRONJ Prevention and Jawbone Regeneration	Susana Simoes - Non-viral CRISPR/Cas9-based nanoformulation to gene editing aged cells

14:00-15:30

Matteo D'Este - Hyaluronan-based transcript activated matrices and biomaterial inks for bone tissue engineering	Mira Hammad - Engineering a fully bone organ with active remodeling and vascularization on biphasic calcium phosphate scaffolds	Abayomi Yusuf - Immunomodulatory Effects of Chromium-Doped Nanoparticles on Macrophage Polarization for Osteoporotic Bone Repair and Remodelling	Manju Saraswathy - Effect of Crosslinker Molecular Weight in Nanogel Plasticizers on the Glass Transition Temperature of Polymer Matrices	Francesca Tivano - Sustainable drug-releasing bacterial cellulose patch for antioxidant and antibacterial wound healing	Lucie Bařáková - Pre-vascularized Skin Constructs as a Basis for Vascular Wall Engineering	Kartikeya Dixit - Material extrusion-based additive manufacturing of gelatin-based hydrogels for urethral tissue engineering
Asma-sadat Vaziri - Tuning the crosslinking and void fraction of highly flowable microparticles directs cell infiltration and multicellular organization	Ziyuan Luo - A changing world: matrix viscoelasticity and degradability synergize to govern stem cell mechanobiology differentially in 3D vs 2D	Lokitha Raju - Praseodymium-Nanocarriers for Immunomodulation and Bone Regeneration in Osteoporosis	Zsuzsanna Réka Tóth - Metal-oxide nanoparticles' effect on in vivo and in vitro applications	Giuseppe Cutietta - Bio-based injectable self-healing hydrogel from modified pectin and gelatin for chronic wound treatment	Venegas Bustos - Co assembled fluorescent self-assembling peptide probes enable visualization of macrophage uptake and polarization	Nele Pien - Light-based 3D-printing of tunable photo-crosslinkable gelatins for urethral repair
Niccolò Bianco - Screening and combinatorial optimization of bioactive ions for multi-phase bone regeneration	Eulalie Lafarge - Investigating cholesterol-containing liposome toxicity, immunogenicity and penetration in neuronal cell lines and brain organoids	Shuo Jin - Macrophage-targeted and reprogrammed exosome-functionalized fibrous scaffold promote heterogeneous tissue regeneration	Maria Grazia Raucci - Hybrid Black Phosphorus Quantum Dots-Polydopamine Platform for Tunable Neural Activity Modulation	Joana Silva-Correia - Bio-based antibacterial gelatin-alkali lignin membranes as multifunctional interfaces for soft tissue engineering	Elena Garcia-García - Protein-based hydrogels for microfluidic-based and bioprinted cancer models	Isabelle Martiner - Matrix architecture governs urethral organoid fate: phenotypic responses across soft, stiff, and porous collagen type I substrates
Niels Willemens - Self-growing biobrid engineered living matter with multiscale mechanics using mechanically programmable synthetic cells	Tamaki Naganuma - Intra/extracellular functions of inorganic nanozymes for anticancer treatments	Negin Pournoori - Modulating Immune Responses of Superparamagnetic Iron Oxide Nanoparticles by Smart Biopolymer Coatings	Elena Filova - Au-nanoparticle-doped PVA-PEG nanofibers for wound healing applications	Sofia Melo - Recombinant spider silk films for vascular tissue engineering	Robert Willemarck - Dual-functional GeMANB hydrogels crosslinked with thiolated elastin with tunable mechanics for volumetric bioprinting	Emilie Vonna - Dual vascularization: engineering a 3D perfusable vascular model integrating blood and lymphatic vessels
Rachel Wandless - Building a gradient scaffold to support entheses repair using SHED cells	Rita Grimalt Mirada - A Microengineered Platform for Geometrical Confinement and Dorsoventral Patterning of Human Spinal Cord Organoids	Abdelmohsen Abdellatif - Effect of Chitin Nanocrystals on Performance Properties of Tropocollagen-Based Nanocomposite Hydrogel Membrane	Jaier Chen - Geometric optimisation of 3D-printed axetic meshes enabling lung-mimetic biaxial straining of collagen scaffolds	Leonor Resina - Light-based 3D cell bioprinting: implications of bioink for an artificial skin prototype		

15:30-16:30

16:30-17:00

Fellow's debate
Coffee break & Poster Session

OEH	Okapi room 2	Okapi room 3	Gorilla room 1	Gorilla room 3	Gorilla room 4	Darwin Hall	ZAAL 8
Biomaterials Combined with Cells (Cell-Instructive Materials)	Nanocarriers for Drug and Gene Delivery	Biomaterials Science lectureship symposium	Scaffolds for advanced cell models of disease including tumour microenvironments	Metallic Biomaterials	Bioengineered Platforms for Studying Environmental Toxicity	Beyond Methacrylates Advanced Chemistries for Dynamic, Bioactive Hydrogels	Novel treatment approaches for nerve repair and functional regeneration
	Christine Jérôme	Maria Southall	Serena Best & Nathalie Bock (chair) & Malavika Nair & Amaia Cipriá Sagardia (co-chair)	Christine Selhuber-Unkel	Silvia Faré & Federico Vozzi (co-chair)	Oscar Castano-Linares & Shane Browne (co-chair)	Srinivas Madhuri & Victor Carriel (co-chair)
Matt Baker	Anitha Ethirajan	Hua Wang	Jennifer Ashworth	Diego Mantovani (1051)	Monica Boffito	Laura De Laporte	Victor Carriel Araya (1005)
Malgorzata Włodarczyk-Biegun	Fiammia Fruzzetti - Improving non-viral gene delivery by osmotic shock: mechanistic insights into enhanced nucleic acid-dependent transfection efficiency	Matt Webber	Anna Taubenberger	Rosario Daniela Moreno Mora - Metal-Coordinated Surface for Stem Cell Fate Control in Bone Tissue Engineering	María Antonia Cassa - Lbl nanocoating to improve biocompatibility of aged cardiac tissue 3D models for cardiotoxicity screening	Saurabh Joshi - Engineering Dynamic Covalent Hydrogels: Impact of Polymer Architecture and Multivalency on Functional Properties	Caroline Taylor - In vivo Validation of a 3D ex vivo Nerve Injury Model
Vinita Dsouza - Role of 3D bioprinted dental pulp stem cells and stem its secretome for in vitro pulp regeneration	Ian yao - A Compact Inhalable DNA Tetrahedron Carrier for Efficient Pulmonary microRNA Delivery	Martina Birocco - Assessing the humidity effects on fracture behavior in polycrystalline alumina: a microcantilever study and phase-field modeling of slow crack growth.	Amir Abrishami - Evaluating nanoparticle penetration in tumor like matrices using a volumetrically 3D printed model	Rishad AR - Comparative Fatigue Performance and Microstructural Characterization of Ti-6Al-4V Biomaterial Fabricated via Advanced Manufacturing Techniques	Elena Veronesi - 3D Bioprinted Fibro-Lung Model as tool to predict the mineral fiber-induced fibrosis	Emircan Sert - Sacrificially templated multiscale porous 3D bone models using photo-crosslinkable star-shaped polymers for cell-driven vascularisation	Fábio Garrudo - iPSC neural differentiation on biostable sulfuric acid-treated PEDOT:PSS under electrical stimulation
Sudip Mukherjee - Engineered cell laden hemostatic hydrogels for all round rapid repair of diabetic wounds and liver bleeding	Preeti Salve - Engineering quality-by-design optimized layer-by-layer PLGA based carriers for microRNA gene therapy in acute respiratory distress syndrome	Sowmya Joshi - Porous Microcrystalline Diamond Bio-interfaces for Ultrasensitive early detection of CEA and CYFRA 21-1 biomarkers	Óhane Mítxelena-Iribarren - Engineering 3D bone organotypic models of dormant breast cancer metastasis to study cell-extracellular matrix crosstalk	Michal Bartmatski - Zinc-Incorporated Porous Coatings on Ti-35Nb-7Zr-5Ta Alloy Produced by Micro-Arc Oxidation for Biomedical Applications	Marie Céline Lefevre - High-throughput neuro-nanotoxicity studies of manufactured nanomaterials with complex microfluidic blood-brain barrier models.	Martina Konecna - Development of tissue-like microenvironments using dynamic cell-crosslinked hyaluronic acid based hydrogels	Anna Mariano - Dynamic Alginate-Based Hydrogels for Modulating Neural Cell Function
Lydia Blacklock - Engineering an Immuno-instructive Mucus for Inflammatory Bowel	Renan da Silva Nunes - Integrating experiments and molecular simulations to elucidate nitric oxide delivery in chemometrically optimized chitosan nanoparticles	Lenny Van Daele - Poly(alkylene terephthalate)s as a platform material for melt electrowriting	Clara García Astrain - Monitoring 3D printed disease models: tools and strategies	Iria Lucena Araujo - Tailored Surface Finishing of Biodegradable Fe-Mn-C Alloys through Dual Organic-Inorganic Acid Pickling	Licia Chiudaroli - A porous alveoli-like 3D lung model for investigating microplastic interactions with lung tissue	Thibault Sampon - Combining Light-Based Chemistries with Supramolecular Biomaterials for Tissue Engineering Applications	António Salgado - Cell Secretome and Biodegradable Biomaterials for Nervous Tissue Regeneration
Petr Humpolíček - Beyond conductivity: conductive polymers as local regulators of electrical and redox microenvironments	Marin Smoljo - Archaeosomal Nanocarriers for Oral Drug Delivery Based on a Chemically Tunable Tetraether Lipid Platform	Zahra Akbarpour - Development and characterization of albumin-based materials	Özüm Yıldırım Semerci - Engineering biomimetic lung tumor microenvironments using plant-derived hydrocolloid bioinks	Kokilaramani Seenivasan - Functional decoding of microbially influenced corrosion via metaproteomics	Elisa Pochettino - 3D engineered human cardiac tissues as platforms for cardiotoxicity assessment	Paulina Nunez Bernal - Dynamic hydrogels enable volumetric bioprinting of functional iPSC-derived heart constructs for in vitro cardiac modelling	Meera Alex - Multifunctional Chitosan/Celastrol Neural Interfaces with Tunable Electrochemical Properties
Tsung-Yen Lee - Engineered recombinant strategies to organohydrogel design for tissue engineering	Monika Papić - Hybrid Mesoporous Silica Nanoparticles-Chitosan Hydrogels for Controlled Local Antibiotic Delivery in Wound Care	Pauline Desoutter - Development of composite acrylic bone cements: effect of HEMA/MMA ratio on the formulation	Rebekah Kay - Alginate-based hydrogels to quantify ECM viscoelasticity	Lin Zhong - Tunable Bioactive Hydrogels via Bisphosphonate-Metal Coordination	Patrick Kuntschke - Sacrificial scaffolds as a reproducible and scalable platform for perfusable microvascularized 3D tissue models	Himanshi Tewari - Development of Boronate Ester-based Biomaterial Inks for 3D Bioprinting: Correlating Rheology and Printing	Raimondo Stefania - Innovative biomaterials in Peripheral Nerve Repair
	Gabriel Barrero Rodríguez - Multifunctional large pore mesoporous bioactive glass nanoparticles for biomedical applications			Thibaut Bahin - Detection of enzymes using a wireless, implantable, and bioresorbable device	Gerardina Ruocco - Electrospun Fiber-Based Scaffolds for In Vitro Cardiac Tissue Modeling	Anna Vilche - Thiol-ene PEG-Tuned HA-Norbormene Hydrogels Enhance Brain Organoid Diffusion and Maturation	(Madduri)

19:00.....

YSP's Night Out

QE#	Okapi room 2	Okapi room 3	Gorilla room 1	Gorilla room 3	Gorilla room 4	Darwin Hall
Biomaterial-driven tissue regeneration and aging	From Bioactive Materials to 3D-Printed Solutions: Advancing Spinal Fusion and Back Pain Therapies	Advancing Biomaterials through Biointerfacial Reaction Mechanisms	Bioinspired and Biomimetic Materials	Bioadhesives - Strengthening the Bond	Beyond Biocompatibility: Advanced Biomaterials for Therapy and Repair: the DAEDALUS and HYDROHEAL Projects	Emerging Biomaterials and Fabrication Technologies for Soft Tissue Regeneration
Riccardo Levato	Miguel Dias Castilho	Takuya Matsumoto & Mako Kobayashi (co-chair)	Heinz Redl & Ana Rita Araujo (co-chair)	Mark Bohner	Giovanni Vozzi & Piergiorgio Gentile (co-chair)	Maria Elisabete Silva
Khoon S. Lim	Cecilia Persson	Kunio Ishikawa	Michiya Matsuaki	Nicholas Dunne	Conrado Aparicio	E. Silva (803)
Bijay Kumar Karali - 3D printed Ti6Al4V TPMS bone-analogs: bridging mechanical asymmetry and in vivo osseointegration.	Leena R Chaudhari - Xenogenic Spinal Cord ECM Bioink for 3D Printing Application to Restore Sensorimotor Function Through Axonal Reconnection in Rat Complete Spinal Cord Transection	Diane GUYOT - Coupling-agent-free biofunctionalization of nitinol stent retrievers to enhance thrombus engagement in mechanical thrombectomy	Mariana Magalhães - Engineering the Spleen: Photocrosslinkable Hydrogels for Volumetric Bioprinting of a Red Pulp-Inspired 3D Microenvironment	Ronak Afshari - Multicomponent Reaction-Derived Self-Healing Bioadhesives for Treatment of Chronic Wounds	Ignacio Reinal - Tuning the synthesis of methacrylated alginate hydrogels for enhanced bone regeneration	Ana Telma Silva - Experimental and Computational Optimization of Melt-Electrowritten Polycaprolactone Scaffolds for Hydrogel Encapsulation in Pelvic Organ Prolapse Repair
Sofia Joaquinito - 3D-Printed photoactive pectin-silk fibroin film for skin wound healing	Francesca Todescato - Comparative Analysis of Simulated Degeneration Strategies for the Development of Intervertebral Disc Biomaterials	Ayano Ogura - Effect of Residual Alumina Particles after Blasting on Apatite Formation and Osteoblast Activity on Titanium Surfaces	Hilal Yilmaz-Dagdeviren - From Quince Seeds to Osteo-Dental Regeneration: QSM/nHAP Scaffolds for Mandibular Repair	Alexander Nottegar - Volumetric additive manufacturing of cell-loaded hydrogel adhesives for hard-to-soft tissue interfaces	Chiara Tonda-Turo - Stimuli-responsive composite hydrogels for the treatment of vertebral and alveolar fractures.	Katrin Kelchtermans - Taming biodegradation in peptide-crosslinked hydrogels
Julia Martínez - Exploring bioactive scaffolds in Spinal Cord Injury rat models targeting neuroinflammation and regeneration	Beatrice Francesca Massel - Bioactive and Load-Bearing Calcium Phosphates for Developing Biomimetic Spine Fusion Implants	Seiji Yamaguchi - Improving Ion Release Properties of Iodine-Containing Calcium-Deficient Calcium Titanate for Simultaneous Osteogenesis and Antibacterial Activity	Aleksandra Benko - Collagen scaffolds and electrical stimuli affect metabolism of the hiPSCs-derived cardiomyocytes	John Redmond - The role of a phosphoserine-modified calcium phosphate adhesive in augmenting osteoclast response and bone remodeling	Daniel Salthouse - Bio-orthogonally cross-linked alginate-based hydrogel for bone tissue engineering	Cindy Elschner - Medical Lace Embroidery: Designing Structural and Mechanical Heterogeneity in Biotextiles
Chenxi Pan - Mechanochemically-reprogrammed stem cell exosomes reconcile the biogenesis-internatization trade-off to resolve pulmonary fibrosis	Wan Chi Pan - ROS-Responsive Hydrogen-Releasing Scaffolds for Sustained miRNA Sponge Delivery in Spinal Cord Injury	Mako Kobayashi - An Extracellular Matrix-Based Blood-Brain Barrier Model for Evaluating Nanoplastic Toxicity	Tali Tavor Re'em - Recombinant spider silk-enriched alginate scaffolds for long-term bovine mesenchymal stem cell expansion	William Austin - Lubricating nanoparticles with sheltered cationic charges maintain cartilage adhesion and lubrication	Hana Danan - Lipid-composite microspheres (LCM) by CryoXpand® technology: biocompatible carriers for statins delivery in bone tissue regeneration	Eleonora Marta - Engineered oxygen-delivery particles for advanced colorectal tissue engineering
Robert Hume - An elastic and degradable blood vessel graft to regenerate damaged arteries	Stefania Benazzato - Electrically Conductive Nanocomposite Silk Fibroin Hydrogel for Spinal Cord Injuries Repair	Masaya Yamamoto - Protein Adsorption and Macrophage Responses for Nanoparticles with Different Oxidation Degrees	Jan Grzelak - Nanostructured bioceramic surfaces potentiate antibiotic efficacy against P. aeruginosa	Mariana Zarur - A Mucoadhesive Hydrogel Stent Approach for Managing Esophageal Mucosal Ulcers	Daniel Moreno Duarte - Hemidesmosome-Promoting and Antimicrobial Peptide Nanocoatings for Transepithelial Titanium Implants: Evaluation in a Post-Infection Co-Culture Model	Kee Woei Ng - Exploiting Keratin Versatility to Produce Novel Templates for Biomedical Applications
Diana Soares da Costa - Lytamer-containing layer-by-layer constructs enhance the migratory capacity of fibroblasts from aged diabetic patients	Xavier Barceló - Placenta-derived ECM as a Biostructive Biomaterial for Spinal Cord Tissue Engineering	Jie Zheng - Spontaneous macrophage separation strategy for fabricating bilayer hydrogels with seamless interfaces and programmable biointerfacial structures	Mariana Reis - Bio-Mechano-Compatible Electrospun Scaffold as External Support to Prevent Autograft Dilatation in the Ross Procedure	Margarida Sacramento - Bioinspired putulan-based adhesive coacervate films for targeted buccal delivery of peptides	Pablo Ferri - Physicochemical-informed Bayesian machine learning for the optimization of alginate methacrylation	Marta Confalonieri - Enhancing Polyvinyl Alcohol hydrogel stiffness via thermal and mechanical treatments for soft tissues repair
Katja Nadler - Biodegradable Wound Dressing Using a Synergistic Micro- and Nano-Architecture of Silica Gel and Poly(3-hydroxybutyrate) for Tissue Regeneration, as a platform technology for hydrophobic drugs: Evaluation in a 3D In Vitro Full Thickness Skin Model	Akash Garhwal - Mechanical microenvironment dictates astrocyte fate in human cortical organoids	Tatsuro Goda - Bypassing endocytosis for DNA delivery using amphiphilic phospholipid mimetic polymers	Margaux Rodriguez - Elastin-Like Polypeptide Extracellular Matrix Mimics for Artificial Skin Models	Marta Fernandes - Electroactive poly (L-lactic) acid thin films as platforms for modulation of PC12 cells	Daniel Sánchez García - Design of an interoperable digital repository of structured and contextualized hydrogel experimentation	Raúl Escibano - Recombinant Elastin-Like Polymer-Based Basement Membrane for Tissue-Engineered Skin Regeneration
Coffee break & Poster Session						
Jean Leray Award: Małgorzata Włodarczyk-Biegun (chaired by Elżbieta Pamula)						
QE#	Okapi room 2	Okapi room 3	Gorilla room 1	Gorilla room 3	Gorilla room 4	Darwin Hall
Biomaterials across Tissues and Diseases	Antimicrobial Biomaterials and Biocoatings	Precision Polymer Chemistry as a tool to modulate biological and biomedical functions	Bioinspired and Biomimetic Materials (II)	S61: Regulatory	S63: Women Leading	AI-Integrated Approaches for Next-Generation Tissue Regeneration
Khoon S. Lim	Martin Birkett & Cecil Cherian Lukose (co-chair)	Anna Finne Wistrand & Daniela Pappalardo (co-chair)	Michiya Matsuaki	Valentina Calderai	Ana Paula Rosifini & Ana Paula Pêgo (co-chair)	Sandra Pina & Miguel Oliveira (co-chair)
Riccardo Levato	Sanjukta Deb	Fredrik Schaufelberger	Heinz Redl	4 invited speakers + discussion	4 invited speakers + discussion	Juan Antonio Marchal
Ewout Muylle - Non-vascularized abdominal rectus fascia as a natural biomaterial for cross-disciplinary soft-tissue reconstruction	Ángel Serrano-Aroca	Esra Kasapgil - Interactive endothelium-mimicking nanocoatings enable anticoagulation-free hemocompatibility in artificial placenta systems	Francesca Boccafossi - Extracellular matrix (ECM) as a powerful biomaterial for regenerative medicine applications			Stanislaw Marecik - Digital twin and machine learning pipeline for the microfluidic generation of mineralized gellan-alginate microgels for osteochondral tissue engineering
Alice Zoso - Modulation of oxidative stress in cardiac fibrosis through chitosan hydrogels	Andréa Cândido dos Reis - Development, Physicochemical Evaluation, and Antibiofilm Activity Of A Gel Containing Nanostructured Silver Vanadate Decorated With Silver Nanoparticles	Tania Mariastella Caputo - Engineered polymer carriers integrated with Lab-on-Fiber photonics for light-controlled locoregional drug delivery	Amrutha Varshini Hariharan - Development of the next-generation of biomaterials through glycan-functionalized polyethylene glycols			Emanuela Jacchetti - Two-photon polymerized 3D microcavities for architecturally controlled stem cell culture platforms
Luis García-Fernández - Dual-detectable nanoparticles for tracking cell fate in autoimmune diseases	Toby Lam - Borosilicate-based Bouncy Bioglass with antimicrobial properties	Jasper Hoorick -	Helen McCarthy - Design of a Targeted Peptide Nanocarrier for Nucleic Acid Delivery			Gabriel Gröbächer - Optical Tomography enables Density Based Adaptive and Context-Aware Volumetric Printing
Elena Diana Giol - Next-Generation Gelatin-Alginate Cryogels Coated with Dopamine and Combined with TGF-β and FAK Inhibitors for Effective Hypertrophic Scar Management	Deshani Gamage - Degradable PLGA coatings incorporating organometallic complexes for controlled antibacterial activity on implants	Elena Coccia - Electrospun P3HB fibers functionalized with hesperidin for skin regeneration	Syeda Mahwish Bakht - Liquefied-Core Microcapsules as a Platform for In Vitro Endochondral Ossification			Zahed Tavangari - Preserving myoblast viability in extrusion bioprinting: An FEM-driven machine learning surrogate for extrusion parameter optimization
Aleksandra Serafin - Towards the development of an optoelectronic platform for electroactive tissue stimulation	Daniel Ruiz Molina - Bioinspired phenol-based coatings against antimicrobial resistance	Mauricio Sarabia-Vallejos - Fabrication of porous PET-RAFT scaffolds incorporating PLGA-Insulin nanoparticles: Enhancing bone tissue regeneration via 3D printing.	Maria Ribeiro - Bone-guided biomaterials to modulate nerve-bone crosstalk during regeneration			Alfredo De Cillis - Predicting Wound Closure and Future Segmentation Masks in Wound Healing Assays
Ahmed Swilem - Zwitterionically modified guar gum for 3D bioprinting of anti-biofouling cell-laden biomaterials	Inês Gonçalves - Lights On, Resistance Off? Investigating Bacterial Resistance to Light-Activated Graphene	Sijtze Buwalda - Starch-hydroxyapatite composite biomaterials with hierarchical porosity	Mathapati Santosh Sadashiv - Bioactive crosslinked human placental ECM hydrogels for diabetic wound repair			Greta Dei Rossi - AI-driven analysis of pore geometry-dependent mineralization in silk fibroin scaffolds using synchrotron imaging

08:15-9:45

9:45-10:15

10:15-11:00

11:00-12:30

12:30-14:00
12:30-14:00
14:00-15:00

Maria Lobo - Recreating the Liver Microenvironment with Human-Derived Biomaterials		Sophie Jermyn - Protein nanofiber resins for 2PP fabrication of immotostimulatory microswimmers	Michael Bartolf-Kopp - Lignocellulosic material blend for melt electrowriting to alter mechanical and bacterial properties			Ding Yuan - Morphology-driven cell sorting based on AI inference enriches dental pulp stromal cells for regenerative tissue engineering
Lunch						
Poster Session						
ESB General Assembly						
QEHE	Okapi room 2	Okapi room 3	Gorilla room 1	Gorilla room 3	Gorilla room 4	Darwin Hall
New Materials and Applications for Volumetric Bioprinting	Session: Panel anniversary	Implants in orthopaedics	Smart Biomaterials and Bio-adhesives to Combat Pathogenic Microbes	Composite and Hybrid Biomaterials	Ethical by design Designing biomaterials for replacement, reduction and refinement	Smart and Stimuli-Responsive Biomaterials
Kenny Dalgarno & Julia Siminska-Stanny (co-chair)	Liz Tanner and Gino Ambrosio	Louise Jennings & Lillian Zhang (co-chair)	Jack Wychowanec & Margarita Trobos (chair) & Helena Azevedo & Sonia Gerza (co-chair)	Nicholas Dunne	Dimitrios I. Zevgolis & Zarah Walsh-Korb (co-chair)	Juan Antonio Marchal
Paul Delrot	Panel Anniversary	Ruth Cameron	Mohamed Elsayw	Maria Farsari	Zarah Walsh-Korb	Tina Vermonden
Vignesh Krishnamoorthi Kaliannagounder - Volumetric bioprinting of cell-laden GelMA biomaterials for biomimetic modelling of vulnerable atherosclerotic plaques		Aditya Nandakumar - Mapping the effects of chamber and extruder temperatures on PEEK sheet gyroid lattice properties for medical implants	Maria-Pau Ginebra	Teresa Mattak - Inorganic-organic hybrid coatings with siderophore-like activity	Francesca Perin - From food to animal-free in vitro testing: engineering photocrosslinkable gastric dECM materials	Jay Henderson

15:00-16:30

QEHE	Okapi room 2	Okapi room 3	Gorilla room 1	Gorilla room 3	Gorilla room 4	Darwin Hall
Gerardo Cedillo-Servin - One-step spatial photo-programming of cell alignment in 3D patterned hydrogels via grayscale light-sheet volumetric bioprinting		Huijie Lillian Zhang - A finite element study on the primary fixation of a cementless PEEK tibial component in total knee arthroplasty using a gyroid porous metaphyseal stem	Vitaliy Khutoryansky - Galleria mellonella as a 3Rs-compliant in vivo platform for preclinical screening of antimicrobial compounds, nanoparticles and formulations	Justine Montassier - Star-shaped PEG-PLA copolymer/ Gelatin hydrogels for tunable layered materials in colorectal tissue regeneration	Nathalie n.bock@qut.edu.au - Multicellular bone tumour microenvironment platforms for high-content imaging analysis and drug screening	Matthew Burgess - Ionomeric Extracellular Matrices for Dynamic Tissue Engineering
Lino Prados Martin - Filamented Light 3D Bioprinting Enables Anisotropic Stiffness Gradients for Controlled Vascularisation		Raelene Cowie - Wear performance of an all-polymer total knee replacement	Estefania Echeverri - KR-12 functionalised collagen as an antimicrobial biomaterial ink for bone regeneration	Eizbieta Pamula - Polysaccharide-based dressing enriched with zinc oxide nanoparticles and bacitracin for infected wound treatment	Daniela Duc - Investigating the effects of electrical stimulation on the motility and morphology of glioblastoma cells in vitro for improved engineered glioblastoma in vitro cell models	Gabriela Maria Fortunato - 4D bioprinting of photo-curable polymers for the fabrication of self-folding structures
Rui Pedro Silva - Chemically modified gelatin-based hydrogels for the volumetric printing of stents for mucosa regeneration		Tshepang Dipholo - Gravimetric determination of PEEK-OPTIMA™ wear	Anja Lode - Mesoporous Bioactive Glasses as Carrier Systems for Local Bacteriophage Delivery in Implant-Associated Infections	Lara Troncoso Afonso - Plasmonic granular hydrogels for 3D printing breast cancer models and monitor cell behaviour by Surface-Enhanced Raman Spectroscopy (SERS)	Federica Ferla - Pulsed electromagnetic fields (PEMF) reduce inflammation and immune cell recruitment in an in vitro osteoarthritis model.	Maria M. Pérez-Madrigal - Electroactive polysaccharide-based hydrogels: targeting stimuli responsive biomaterials for biotechnological applications
Astrid Quaak - Radiopaque volumetrically printed PCL scaffolds for real-time in vivo degradation monitoring		Tina Sadat Hashemi - A Bioactive Composite Coating with Physical Interlocking On 3D-Printed WE43 Magnesium Alloy to Enhance Corrosion Protection and Cytocompatibility for Orthopaedic Applications	Matthew McGrath - An anti-microbial and pro-healing hyaluronic acid dressing to promote diabetic wound healing	Jose Manuel Garcia Torres - Magnetolectric GelMA-Graphene Hydrogels for Remote Cardiac Stimulation and Sensing	Matteo Bortolameazzi - PDAC-on-hand - a microfluidic device for drug screening	Sergio Acosta - Electrostatic topology and hydrophobicity program phase separation and multiphase organization in synthetic protein condensates
Antonio Jaen Ortega - Origami-inspired shape-memory stents fabricated via volumetric 3D printing of poly(δ -valerolactone)		Ilaria Sergio - Bioactive Scaffolds for Optimizing the Soft Tissue-Prosthesis Interface	Maria Pita-Vilar - Cellulose nanofibers as a platform for 3D-printed scaffolds for tissue engineering and Zn-functionalized wound dressings with antibacterial activity	Mario di Gennaro - Development of hybrid nanodevices based on Chitosan/Hyaluronic acid/Folic acid-Carbon Dots for the treatment of lung infections	Cátia Monteiro - Evolving strategies in organ-on-a-chip technologies enabled by human-derived biomaterials integration	Zih Hui Chen - Dual-NIR-Responsive Upconversion Nanoparticle for Remotely Controlled Non-viral Optogenetic Neuromodulation
Hannah Agten - Volumetric bioprinting of gelatin-based inks for osteochondral tissue engineering		Seher Yaylaci - Bioinspired peptide nanofiber interphases improve in vivo osseointegration and mechanical fixation of titanium implants		Saksham Handa - In situ Mineralized Decellularized Extracellular Matrix (DCM)-Alginate based Bioink for Bone 3D-Bioprinting	Mares Bou Sofia - Integrating microfluidics and Layer-by-Layer assembly for the development of scalable RNAi nanocarriers targeting PTSD	

16:30-17:00

Coffee break & Poster Session						
QEHE	Okapi room 2	Okapi room 3	Gorilla room 1	Gorilla room 3	Gorilla room 4	Darwin Hall (270)
Biomaterials for Soft Tissue and Organ Regeneration	Sustainable, Green, and Circular Biomaterials	In Vitro, In Vivo, and Preclinical Evaluation of Biomaterials	Biomaterial-Engineered Microphysiological Systems for Disease Modeling and Regeneration	Session: Industrial	Ceramic and Glass Biomaterials	Scaffold Design for Tissue Engineering
Paul Delrot	Sanjukta Deb	Ruth Cameron	Dimitrios Zevgolis (chair) & Eirini Veliou & Manuela E Gomes (co-chair)	Matteo d'Este	Zarah Walsh-Korb	Tina Vermonden
Petra Kluger	Katrien Bernaerts	Catharina De Schauwer	Eirini Veliou	Invited speakers + discussion	Oscar Castaño Linares	Jeroen Leijten (1142)
Tejaswini Tadge - DLP-Based 4D Printed Hydrogel for Soft Tissue Engineering	Sonali Carje - Plant-Derived Glycoprotein Bioink for 3D Bioprinting and Soft Tissue Regeneration	Heli Skottman	Manuela E Gomes		France Lambert	Bryan Boggaert - Hybrid Poloxamer-Gelatin Bioresins for Soft Tissue Engineering Using Digital Light Processing and Volumetric Additive Manufacturing Bioprinting
Ana Mora-Boza - Engineering Regenerative Niches for Intestinal Therapy via Encapsulation of iPSC-Derived Mesenchymal Stem Cells in Synthetic Degradable Microgels	Ahu Arstan Yildiz - Sustainable Hydrocolloid Bioinks for Advanced 3D Bioprinting Applications in Tumor Modeling and Tissue Regeneration	Audrey Cherblanc - A Resorbable and Biomimetic 3D-Printed Hydrogel Scaffold Driving Large-Volume Soft Tissue Repair: Evidence from a Large Animal Study	Julia Stanny - Volumetrically Printed Porous Hydrogels as Tissue-Mimetic Platforms for Ultrasound-Enhanced Drug Delivery		Martin Michálek - Magnetic mesoporous bioactive glass nanoparticles co-doped with cobalt and boron for angiogenic and osteogenic stimulation	André Castro - Comparison of Viscoelastic Behaviour in TPMS Scaffolds for Bone Tissue Engineering

17:00-18:40

Mareeswari Balasubramanian - Therapeutic ion releasing fluorophosphate glass for ischemic wound care	Hubert Buksa - Non-Cytotoxic Binary Mixtures of Cationic Nanoparticles and Polymer Chains Kill Polymicrobial Communities	Kamil Szpotkowski - Unique properties of blue blood. Structural analysis of hemocyanin proteins with antibacterial and anticancer activity.	Claudia Garrido - 3D microgel-in-hydrogel system providing structural guidance to enhance chondrogenic differentiation in a 3D PEG based degradable hydrogel	Yonggang Zhang - Design of calcium phosphate bioceramics with unique flexibility, elasticity and responsiveness for bone regeneration	Alexis Arcas - High resolution printed 3D artificial scaffolds for studying the influence of extracellular matrix biophysical cues on fibroblast migration
Paula de Dios Andres - Towards semi-synthetic liver-like tissues	Marta Duarte - Cerium-crosslinked Porphyrinidum cruentum EPS/bone ECM composite gels for injectable and moldable bone regeneration	Leonardo Cherubin - A multifunctional microfluidic imaging window for intravital biomaterial validation in living chicken embryos	Isabelle Texier - Chemically modified decellularized extracellular matrix combined with a microfluidic chip to model the early stages of pancreatic tumorigenesis	Soichiro Usuki - Cytotoxicity Reduction of Iron Nitride Particles via Oxidation	Yuchen Li - Digital light processing of γ -PGA (gamma-polyglutamic acid) based sol-gel hybrid biomaterials
Carmine Gentile - Alginate/gelatin/silk fibroin-containing patches protect against myocardial infarction-mediated reduction in cardiac function in a murine model	Cátia Correia - Marine-inspired hydrogels for treatment of diabetic chronic wounds	Basak Coban - Melt-Electrowritten Polymeric Membranes for 3D In Vitro Blood-Brain Barrier Modeling	Amalia Cipitria - Dormancy-inducing 3D engineered matrices to model breast cancer dormancy across scales: the role of adhesion and stiffness in ER+ luminal breast cancer cell lines and patient-derived models	Charlea Berry - In-solution manufacturing of versatile porous phosphate-based glasses for hard and soft tissue regeneration	Sarah Larroude - Polymer-based honeycomb membrane on a 3D porous bioactive glass: towards a new generation of scaffolds for bone tissue engineering
Carlos Marinho Botelho - Sustainable acellular fish skin biomaterial with preserved lipid reservoirs	Thomas Fruteux - The response of human pulmonary cells cultured on cellulose-based membranes under physiological fluid shear stress – a focus on artificial lung applications	Stephany Beyerstedt - A Paper-Based Platform for Skin-on-Chip Modeling of Psoriasis	Uxia Gato-Diaz - An Alternative Supercritical CO ₂ Decellularization Approach for Breast Tissue-Derived Cancer Models	Julia Ce de Andrade - Molybdenum-copper co-doped mesoporous bioactive glass nanoparticle-coated PCL scaffolds for osteomyelitis treatment and bone regeneration	Nabila Mehwish - Thiol-guided peptide-functionalized albumin hydrogels with tunable architecture and bioactivity
Peixi Peng - Multifunctional Plasmonic Hydrogels as Tunable Biomaterials for Mechanobiology of Myogenic Cells	Francesco Busto - From waste to high-value biomaterial: gellan gum hydrogels enriched with pomegranate peel extract for cartilage regeneration				Ece Ozmen - Solvent-free polycaprolactone PolyHIPE scaffolds as safer, open-porous, and clinically relevant tissue engineering matrices
Gala Dinner - Info					

20:00-00:00

QEH	Okapi room 2	Okapi room 3	Gorilla room 1	Gorilla room 3	Gorilla room 4
Biomaterials for Bone and Cartilage Regeneration (II)	From Muscle to Tendon - Advanced Biomaterials for vitro models and therapeutic development	Microfluidic platforms for tissue modelling and micro nano-particle engineering	Enabling Technologies for improved biomaterial research	Mimicking ECM for 3D bioprinted tissue models from bioinstructive inks to AI driven processes	Macromolecular assemblies composed of peptides or proteins
Catherine Levisage	Shane Browne & Manuel Gomez-Florit (chair) & Nicoletta Inverardi & Silvia Chiera (co-chair)	Eleana Kontonasaki & Xanthippi Chatzistavrou (co-chair)	Bikramjit Basu	Enzo Menna & Stefania Benazzato (co-chair)	Guy Patchornik
Quinten Thijssen	George J. Christ (838)	Ryan Sochol	Wanju Liu	Laura Russo	Guy Patchornik
Noemy Vergara Vera - A coacervate based approach to achieve controlled mineralization in bulk collagen constructs	Rui Domingues (220)	Bruna Costa - Sterol-grafted chitosan nanoparticles as bactericidal nano-decoys for Helicobacter pylori eradication	Juliane Spohn - Standardized evaluation of compound-material interactions and antimicrobial activity against BSL-3 pathogens using the ClickIt-Well platform	Thomas Distler - Human Astrocyte to Neuron Reprogramming in Hydrogels: Probing the Influence of Fibrin and Stiffness	1303 (Hue Vu instead of AM)
Margarida Fernandes - Collagen-catechol hydrogels combined with gallium-bioglass nanoparticles for bone regeneration	Marguerite Meeremans - Fibrin-gelatin hybrid hydrogels as a platform for biomimetic mechanically active in vitro tendon modelling	Francesco Bisconti - Real-time oxygen monitoring in 3D printed Organ-on-Chip using optical microsensors	Yael Shlomo - A robotic wound care patient for surgical site infection research	Corinna Barella - Chitosan-based thermoink for long-term 3D bioprinted in vitro CNS modelling	Burcu Sirma Tarim - Self-Assembled Peptide Hydrogels with Bioactive Motifs for 3D Lung Cancer Modeling
Nina Durvin - 3D bone tissue model by triculture of human primary cells on methacrylated gelatin bioink, supported by biphasic calcium phosphate	Giulia Gigante - Toward non-invasive muscle stimulation mediated by NIR-activated polydopamine nanoparticles	Elisa Perelli - Engineering a perfusable bicompartmental hydrogel for artery-perivascular tissue modelling	Qianpeng Li - Application of double-shot pyrolysis GC-MS for the chemical characterization of dental thermoplastics	Filipa Leal - Engineering a Pectin Hydrogel Bioink for Endothelial Cell Growth in Soft Neural-Like Matrices	Nazaruddin Mohammad Nasser - Designing peptide hydrogels as a localised delivery vehicle for adjuvant glioblastoma synergistic chemotherapy
Joshua Jones - Using natural crosslinker alternatives to modulate bone-ECM hydrogel characteristics	Michał Piłkuć - Adipose-derived stromal cells as a model for evaluating peptide-functionalized chitosan biomaterials for musculoskeletal tissue regeneration	İsmail Bütün - 3D Hydrogel Biomaterial Bio-Anodes for Biophotovoltaic Energy Harvesting	Andrea Garcia Lizarribar - A magnetically navigated microfluidic platform for controlled in vitro assessment of microrobot performance	Paula Marques - Enabling three-dimensional electrical stimulation of neural stem cells in decellularized extracellular matrix scaffolds using graphene-based electrodes	James Warren - Injectable aggregan-mimicking peptide-CS hydrogels for early-stage cartilage repair
Shu Nakagawa - Enhancement of Osteogenic Differentiation Using Gelatin-Coated BaTiO ₃ in PLLA Scaffolds	Danilo Alves - Synthesis of a highly soluble, biodegradable and conducting copolymer for biomedical engineering applications	Teresa Simon-Yarza - Engineering of 3D outer blood-retinal barrier on a chip	Susana Rocha - Imaging Cell-Matrix Interactions: From Synthetic Fibrous Hydrogels to Molecular Tension Sensing	Amelia Heslington - Investigating the immune landscape of the gut-joint axis using a novel 3D bioprinted in vitro model of human synovium and its extracellular matrix	Junyi Song - A Barnacle-Inspired Mineralization Peptide for Dentin Occlusion and Bone Repair

08:30-10:00

Veronica Rondahl - Osteoinductive effect of an ectopic hydroxyapatite synthetic bone graft – a μ CT and histopathology-focused study	Nehar Celikkin - Linking Multi-Omics, Spatial Imaging, and Contractile Function to Benchmark Engineered Skeletal Muscle Maturation	Valentina Marotti - Micrometer-Sized Hydrogel Beads for siRNA-Polyplex Colonic Delivery via a Microfluidic-Assisted Approach	Manuel Pires-Santos - Human protein-based ultrathin membranes toward the development of self-assembled cell aggregates for osteo differentiation.	Sara Silv�rio - Novel xeno-free hPLMA/dECM-MA biomaterial for 3D DLP bioprinting	Tiziana Brosio - Phlorotannin-inspired coatings for enhanced cytocompatibility and anti-inflammatory protection
Sundara Moorthi Ganesan - Metal oxide modified fluorophosphate nano glass filled polymeric scaffolds for enhanced bone repair		Yiting Lei - Nano-Micron Combined Hydrogel Microspheres for Multifaceted Antioxidant Defense in Osteoarthritis	Julian Serna - PEG-nitrosothiols as kinetic regulators of thiol-maleimide crosslinking for homogeneous and compositionally diverse hydrogels	Rosanna Hood - Anti-thrombotic and decalcifying dECM embedded bilayer grafts for vascular tissue engineering	Somayeh Taheri - Electrostatically tunable peptide hydrogels for embedded bioprinting and nanoparticle delivery

10:00–10:45

Coffee break

QEH	Okapi room 2	Okapi room 3	Gorilla room 1	Gorilla room 3	Gorilla room 4
Hydrogels for Tissue Engineering and Regeneration	Engineering Living Materials for Emerging Health Needs	Nanomedicine and Biomaterials Converging Platforms for Next-Generation Therapies	Bio-fabrication and bioactive biomaterials for regulating the host-graft interactions Advances and challenges in the field	Biomaterials for Localized and Targeted Therapies	Metabiomaterials and Functional Biomaterials: Bridging Structure, Mechanics and Biology
Sing Y. Chew	Barbara Gerratana & Laura Martinelli (co-chair)	Alexandre Ceccaldi & Arn Mignon (co-chair)	Srinivas Madduri & Bikramjit Basu (co-chair)	Laura Russo	Dr Elise Pegg & Dr Caroline S Taylor (co-chair)
Catherine Levisage	Luigi Ambrosio	Laurent L�vy	Bikramjit Basu (1193)	Catalina Vallejo-Giraldo	Sophie Cox

QEH	Okapi room 2	Okapi room 3	Gorilla room 1	Gorilla room 3	Gorilla room 4
Miguel Morais - Tuning Alginate Matrix Viscoelasticity Reveals Mechanoregulation of Microglial Inflammation.	Johanna Meyer - Functional hydrogel materials for biotechnology: From design to 3D-printed systems	Niek Stassen - Mesoporous Silica Nanocarriers for miRNA-mediated Osteogenic and Myogenic Differentiation	Hritwick Banerjee - Light-addressable liquid crystal elastomer metamaterial scaffolds for dynamic skeletal muscle regeneration	Rui Ling Lee - Investigating the role of a plant-derived polysaccharide in chemoresistance in acute myeloid leukaemia	Maria Kalogeropoulou
Sweety Evangelini - Post-Ischemic Remodeling: Elastin-like Recombinamer Hydrogel in ST-Elevated Myocardial Infarction (STEMI)	Manuel Salmeron-Sanchez - Bacteria-based materials in cell engineering	Ana Laura Coria Guti�rrez - Magnetically Driven Cyclodextrin Nanoplatfoms for Site-Specific Osteosarcoma Treatment	Raunak Lohar - Bioactive implant surface coatings using crude exopolysaccharides from <i>Limosilactobacillus reuteri</i>	Cristina Canal - New hydrogel vehicles for reactive oxygen and nitrogen target tumorigenesis and liver damage in vivo	Marco Piacentini - Stochastic Voronoi-Based Data-driven Generation of Trabecular Bone Surrogates with Morphologically Representative Microarchitecture

10:45–12:15	Banafshe Pishva - High-throughput screening of biomaterials; A new methodology for screening of hydrogels for the organ-on-chip applications	Daria Podstawczyk - Photosynthetic biomaterials based on microalgae for oxygen generation and metabolic activity analysis	Qiongjiao ZENG - Nanozyme-functionalized 3D-bioprinted hydrogel for temporally programmed neurovascularized bone regeneration	Ziba Najmi - Biofilm prevention and quorum-sensing interference via surface-bound peptoid	Cristina Martins - Nanotherapy Approaches to Combat <i>Helicobacter pylori</i> : Tiny Particles, Big Impact	João Ribeiro - A molecular-weight-tuned fibrin–alginate IPN for modelling stiffness-linked cardiac ageing in 3D
	Heidi Vänskä - Low temperature gelation of norbornene-functionalized gelatin and PEG-thiol hydrogel	Niloofar Paknezhad - Exploring Fungal Kingdom: Advanced Mycelium Strains as Scaffolds for Biomedical and Wound Healing Applications	Michela Patrucco - Biomimetic hybrid liposomes derived from brain metastatic cells: a novel platform for targeted CNS delivery	Jessica Borges Vilches - Competitive protein adsorption on nanocellulose substrates: Real-time insights into Vroman-type behavior by QCM-D	Bruno Ribeiro - Metals against Leishmaniasis: a study on biodegradable metal nanoparticles against Leishmania infection	Gabriela Kronemberger - Bioprinting of Phenotypically Defined Fibrocartilage Microtissues into Melt Electrowritten Scaffolds to Engineer Regionally Defined Meniscal Grafts
	David Robinson - Human Corneal Epithelial Cell Transfer On Biosynthetic Scaffolds Grown In 3D Printed Cell Seeding Devices To Treat Persistent Corneal Epithelial Defects	Lucie Militão - Dynamic perfusion enhances vascular network formation in human platelet lysate-derived hydrogels	Aygül Zengin - Engineering Ultrasound-responsive Therapeutic Antibubbles for Glioblastoma Therapy	Tamilselvan Mohan - Polysaccharide-based antithrombogenic coatings for superior hemocompatibility and endothelialization	Arian Farokh - Fabrication and Characterization of 3D-Printed Alginate Micro-Implants for Sustained Faricimab Delivery	Juhi Chakraborty - Programming motion and shape-morphing in bioprinted heart tissues via dynamic magnetic fields
	Florian Rummel - Combined Thermal and Rheological Characterization of Polyvinyl Alcohol Hydrogels Using a Freeze-Thaw Technique	Priscilla Quenum - 3D-printing bi-material scaffold for osteo-gingival augmentation	Jayasree Ajakumar - Engineering Metal Nanoclusters for Targeting Amyloid- β Pathology in Alzheimer's Disease	Filipa Campos - Magnetically Responsive Antimicrobial Nanosystems: an Ally Against Biofilms	Cansu Ülker Turan - PVA-Based Wound Dressing Films Incorporating Quercetin-Loaded Chitosan Nanoparticles	Mei ElGindi - Engineering Collagen Microarchitecture to Modulate Stromal Differentiation and Function in 3D Lymphoid Tissue Models
	Huanan Wang - Design and Mechanistic Investigation of Colloid-assembled Self-healing (CASH) gels		Konrad Kwiecień - Erythromycin conjugated to polyanhydride matrix for controlled topical delivery.	Züral Munganlı - Evaluation of Microbial Degradation of Phytic acid and Its Effect on Caco-2 Intestinal Cells	Swarnapriya Kasi - Perivascular biodegradable mesh for delivery of dexamethasone to extend graft latency	
12:15–13:30	Closing Ceremony					
13:30–14:30	Take-away lunch					