

Conference Itinerary

Day 1: May 28th 2025	
8:00 am - 8:15 am	Coffee break
8:15 am - 8:20 am	Welcome and opening remarks
Session 1 – Chair: Sasan Jalili	
8:20 am – 10:00 am	Thanh Nguyen - <i>Biodegradable Piezoelectric Tissue Engineering Scaffold</i>
	Yupeng Chen - <i>Osteoarthritis treatment using Janus base nanotherapeutics on Earth and in space</i>
	Amir Sheikhi - <i>Granular Hydrogel Scaffolds with Hierarchical Porosity Improve Cell Recruitment and Tissue Integration</i>
	Corentin Peyret - <i>Study of the protective effect of a targeted rapeseed nanoliposome on their in vitro digestibility</i>
	Fatemeh Alipanahrostami - <i>In Situ-Formed Immunomodulatory Colloidal Scaffolds for the Treatment of Burns</i>
10:00-10:15	Morning break
Session 2 – Chair: Amir Sheikhi	
10:15 am – 12:00 pm	Kristo Nuutila - <i>Advancing Combat Burn Care with Functional Biomaterials</i>
	Cyril Kahn - <i>From Microfluidic to Biological Model Barrier for Particle Vector Cross-membrane: Application to Intestinal Membrane and Blood Brain Barrier</i>
	Halima Alem - <i>Development of Bio-Printed Cancer Models for a Biomimetic Investigation of Nanoparticulate-Based Therapeutics</i>
	Brenna McAllister - <i>Development of a Functional PSMA(+) Three-Dimensional Human Tumor-Bone Microvascular Model for Investigating Prostate Cancer Bone Metastasis and Therapeutic Targeting</i>
	Su Ryon Shin - <i>Engineering Nano-biomaterials for Tissue Fabrication and Regenerative Medicine</i>
12:00 pm - 1:10 pm	Lunch break on your own
Keynote presentation – Chair: Yupeng Chen	
1:10 pm -2:10 pm	Mark Saltzman - <i>Fabrication of polymer nanoparticles for delivery of nucleic acids</i>
Session 3 – Chair: Cyril Kahn	
2:10 pm - 3:00 pm	Yusuf Khan - <i>Ultrasound-Derived Acoustic Radiation Force to Enhance Bone Repair and Regeneration</i>
	Hang Lin - <i>Generation of a miniature knee joint system for modeling osteoarthritis and associated pain</i>
3:00 pm - 3:15 pm	Afternoon break
Session 4 – Chair: Halima Alem-Marchand	
3:15 pm - 5:00 pm	Ali Tamayol - <i>Biomaterials and (Bio)fabrication for Engineering Tools for Treatment of Soft Tissue Injuries</i>
	Sasan Jalili - <i>Profiling Tissue-Resident Immunity Through Microneedle-Based Sampling</i>
	Delaram Ghanbariamin - <i>Cleanroom-free fabrication of tunable Microneedle arrays for encapsulated Messenger-RNA Delivery</i>
	Steven Toro - <i>In Situ-Fabricated Microneedles Depot for Soft Tissue Drug Delivery</i>
	Rittika Somadder - <i>Plant Seed-Derived Mucilage as a Scaffold-Free Approach for Cultivated Meat Biomanufacturing</i>
	Annie Nguyen - <i>DNA-Inspired Electrically Conductive Nanotubes for Intracortical Microelectrode Stimulation and Recording</i>
	Aditya Ruikar - <i>Development of a Multifunctional Gelatin Methacryloyl-Based Proteoglycan-4 Eluting Scaffold for in situ Repair of Corneal Defects</i>



Day 2: May 29th 2025	
8:00 am - 8:15 am	Coffee break
Session 5 – Chair: Tannin Schmidt	
8:15 am - 10:05 am	Kshitiz - <i>Evolution in connective tissue: how cows solved the problem of cancer malignancy</i>
	Tohid Didar - <i>Nano-biomaterials for diagnostics, therapeutics, and preventing the spread of infectious diseases</i>
	Cyril Kahn - <i>From Microfluidic to Biological Model Barrier for Particle Vector Cross-membrane: Application to Intestinal Membrane and Blood Brain Barrier</i>
	Hossein Ravanbakhsh - <i>Unconventional Strategies for the Biofabrication of Soft Tissue Constructs</i>
	Eun Ji Chung - <i>Harnessing extracellular vesicles as nanotherapeutics</i>
	Arian Jaber - <i>Engineering granular hydrogel scaffolds to tailor cell response and wound healing</i>
10:05 am-10:20 am	Morning break
Session 6 – Chair: Tohid Didar	
10:20 am – 12:00 pm	Mostafa Analoui - <i>Biomedical Entrepreneurship: From Concept to Patients</i>
	Mehdi Kazemzadeh - <i>The FDA and Regulation of Medical Products</i>
	Reza Amin - <i>Commercializing Microfluidics & Tissue Engineering: From Lab Innovation to Scalable Business</i>
	Rheolution - <i>Innovative Non-Destructive Technology for Viscoelastic Testing of Soft Biomaterials</i>
	InPrint Bio – <i>Translating In Vivo Crosslinking Technologies into Regenerative Wound Dressings and Scaffolds</i>
	Eascra Biotech
12:00 pm -1:10 pm	Lunch break on your own
Keynote presentation – Chair: Ali Tamayol	
1:10 pm - 2:10 pm	Yu Shrike Zhang - <i>3D Bioprinting for High-Content Tissue Fabrication</i>
Session 7 – Chair: Ali Ahmadi	
2:10 pm - 3:00 pm	Houman Savoji - <i>Advanced Biofabrication of Functional Biomaterials for Cardiac Tissue Engineering and Heart-On-Chip Applications (Online)</i>
	Steven Cranford - <i>Editors-in-the-Loop: A Publisher's Perspective in the AI-Driven Science Era</i>
3:00 pm - 3:15 pm	Afternoon break
Session 8 – Chair: Kristo Nuutila	
3:15 pm - 5:00 pm	Tannin Schmidt - <i>Biomanufacturing recombinant human Proteoglycan 4 (rhPRG4) for dry eye disease clinical trials</i>
	Ali Ahmadi - <i>Peptide Foam Bioprinting: Engineering Porosity for Tissue Regeneration</i>
	Pier Francesco Ferrari - <i>Next-Generation Nanotechnologies for Cardiovascular Theranostics (Online)</i>
	Sara Badr - <i>Single-step embedded 3D printing of conductive hydrogel network with highly porous insulating foam</i>
	Jinhyung Lee - <i>Computation-aided Design of Rod-shaped Janus Base for Enhanced Tumoral Targeting</i>

Day 3: May 30th 2025	
8:00 am -8:15 am	Coffee break
Session 9 – Chair: Thanh Nguyen	
8:15 am -10:00 am	Derek Rozensweig - <i>Leveraging 3D biofabrication approaches for therapeutic screening and tissue regeneration</i>
	Mehdi Samandari - <i>Tailoring Scaffold Porosity for Controlling Cellular Behavior in Regenerative Medicine</i>
	Elmira Tenhrany-Kahn - <i>New Generation of Targeted Nanoliposome for Brain and Cancer Prevention (Online)</i>
	Pedro Leardin Silveira - <i>Transcellular Transport Model for Curcumin-Alginate Beads: A Computational and Experimental Study</i>
	Jacob Quint - <i>Light-Triggered Spatiotemporal Drug Release within 3D Bioprinted Tissue Models</i>
10:00 am-10:15 am	Morning break
Session 10 – Chair: Mehdi Samandari	
10:15 am – 11:40 pm	Indranil Sinha - <i>Progress In Composite Tissue Bioengineering and Future Applications</i>
	Niloufar Azami - <i>Precision by Design: 3D Printing and the Future of Personalized Orthodontics</i>
	Matthew Zambrello - <i>Therapeutic Potential of Soluble TLR2 Decoy Receptor in Attenuating Periodontitis</i>
	Noah Pereira - <i>Injectable Ceramic-Foam Scaffolds for Enhanced Bone Regeneration</i>
	Elika Shams - <i>How Do Single-Point Mutations Disrupt Extracellular Matrix Protein Function at the Molecular Level?</i>
11:40am–12:00pm	Closing remarks