

2025 TERMIS-AM Conference
Detroit, Michigan
November 9-12, 2025





6:15 PM - 6:30 PM	Transition break		
6:30 PM - 8:00 PM	Poster Session 2 & Exhibitor Viewing / Reception		
8:00 PM - 9:00 PM	SYIS Networking Event		

Tuesday, November 11, 2025				
Time	HALL A	HALL B	HALL C	HALL D
	Scientific Concurrent Sessions 5			
8:00 AM - 9:30 AM	Session 21: Emerging Biofabrication Technologies <i>Session Chair: Feng Guo, Arthur Christian</i>	Session 22: Engineering Strategies to Aid in Diagnosis and Treatment of Ophthalmic Disease <i>Session Chair: Budd A Tucker, Ruchi Sharma</i>	Session 23: Role of Biomaterials, Biomolecules and Processes in Musculoskeletal Tissue Regeneration <i>Session Chairs: Karima Nakayama, Cevat Erksen</i>	Session 24: Special Topic: The Importance of Advocacy in Biomedical Engineering Research <i>Session Chair: Dawn Beraud</i>
8:00 AM - 8:30 AM	Keynote Lecture: Lena Smirnova	8:00 AM - 8:25 AM Keynote Lecture: Engineering next generation microphysiologic systems for the study and treatment of diabetic retinopathy, Maribel Vasquez	Keynote Lecture: Engineering the Regenerative Niche for Multi-Tissue Musculoskeletal Repair, Nick Willett	Keynote Speaker: Dawn Beraud
		8:25 AM - 8:50 AM Keynote Lecture: Evaluating And Engineering A Self-amplifying RNA System For Gene Therapy, Michael Farkas		
8:30 AM - 8:45 AM	Matrix-free Fabrication Of Reproducible And Functional Human Intestinal Organoids With Control Of Polarity, Madelaine Eiken, US	Development Of Fucoidan-based Hydrogel For Improved Retinal Ganglion Cells Repopulation, Asma Qureshi, US	Enhancing Effective Fracture Healing In Ageing Bone: Bioengineered Extracellular Vesicles As Osteochondrogenesis Activators For Targeted Therapy, Kelvin Yeung, Hong Kong	Epithelial Cell Nascent Matrix Deposition Contributes To Lung Injury, Donia Ahmed, US
8:45 AM - 9:00 AM	A Multiscale Bioprinting Platform For The Fabrication Of Hierarchically Aligned Cardiac Tissues, Donghwan Kim, Korea	Non-destructive Assessment Of Retinal Organoid Maturity For Consistent Photoreceptor Replacement Therapies, Nicholas Stone, US	Mechanical Compression And Shear Induce Distinct Macrophage Polarisation And Subsequent Mesenchymal Stromal Cell Differentiation, Martin Stoddart, Switzerland	Programmable Vascular Patterning Via Actuating Extracellular Matrices, Jessica Shah, US
9:00 AM - 9:15 AM	Embedded Bioprinting Of Airway And Alveolar Stem Cells Enables Guided Morphogenesis Of Complex 3D Lung Tissues, Barbie Varghese, US	In Vitro Quality Screening Of Human Corneal Stromal Stem Cells For Cell-based Therapy Of Corneal Scarring, Gary Yam, US	Synthetic Helical Peptides On Nanofibers 3d Scaffold To Activate Cell-surface Receptors And Synergistically Enhance Critical-sized Bone Defect Regeneration, Tongqing Zhou, US	Cyclic Stretch Preconditioning Improves Re-epithelialization In Bioengineered Lung Scaffolds For Transplantation Via Integrin-mediated Mechanotransduction, Shiyuan Bian, Canada
9:15 AM - 9:30 AM	Matrix Mechanics Modulates The Permeability And Contractility Of Endothelium Within Engineered Microvessels, Margaret Stanley, US	Role Of Substrate Biomechanical Properties In Epigenetic Modulation And Phenotypic Stability Of Corneal Endothelial Cells, Saad Asim, US	Advanced Bioprinting Of Hydrogels With Controlled Mineral Gradients For Osteochondral Interface, Cevat Erksen, Kazakhstan	Probing Fibroblast Mechanobiology In Pelvic Organ Prolapse: An In Vitro Stiffness-driven Model, Termitope Obisesan, US
9:30 AM - 10:00 AM	Coffee Break			
10:00 AM - 11:30 AM	Plenary Speaker & Award Session 2 Synthetic Biology and Organoids, Jason Spence			
11:30 AM - 1:00 PM	Lunch Break on Your Own			SYIS Student Meet Mentor Lunch