ISBME Israeli Society for Biomedical Engineering | The Engine of Growth for a Better Life

International Convention Center Haifa | 19 October 2026

FINAL PROGRAM

As of 18 October, 2026 (subject to changes)

08:00-09:00	*Registration, Networking and Hanging of Posters*	*Foyer*
09:00-10:15	Parallel 1: Brain Engineering & Neuromodulation Technologies **Chairpersons**: Moshe Giladi-& Lior Lev-Tov	Hadas Hall
09:00	Bioinspired Nanoscale Intra and Extracellular Optoelectronic Biointerface **Shiri Ashkenazi,** Technion Israel Institute of Technology, Israel	
09:12	Hybrid Hydrogels for Enhanced Axonal Growth **Ariella Nouman**, Tel Aviv University, Israel	
09:24	Breaking Barriers with Bubbles: Ultrasound Nanotechnology for Brain Therapy and Molecular Diagnostics **Tali Ilovitsh**, Tel Aviv University, Israel	
09:36	Fabrication of a Magnetic Implant for Treating Nerve Injuries **Gal Shklarski Shchori**, Tel Aviv University, Israel	
09:48	Electrotherapeutic Modulation of Cerebral Vasospasm: A Novel Approach Enabled by Neoflow Technologies **David Skorohod**, Neoflow Technologies, Israel	
10:00	Sleep-Guided Closed-Loop Deep Brain Stimulation for Disease-Modifying Neuromodulation in Parkinson's Disease **Samer Abboud**, Pulsetech Medical, Israel	
09:00-10:15	Parallel 2: Bio Convergence from Lab to Market **Chairpersons**: Yaakov Diminsky & Shai Melcer	Sponsored by: IBCC LABS Oren Hall
09:00	Medical Bio Convergence in Israel **Shai Melcer**, Israel Innovation Authority, Israel	
09:12	Why Biochip/Bio-Devices Startups Fail & How IBCC Can Help **Yaron Magal,** Israeli BioChip Center (IBCC)	
09:27	Nanopore-AI: Combining Biology, Electronics and Machine Learning to Solve Emerging Biomedical Challenges **Amit Meller**, Technion Israel Institute of Technology, Israel	
09:39	Bio Convergence-Driven In Vitro Models for Studying Cardiovascular System Interactions in Health and Disease **Moran Yadid**, Bar Ilan, Israel	
09:51	Intraoperative Sensor and Alerting System for Phacoemulsification **Yoav Nahum**, Rabin Medical Center, Israel	
10:03	From Lab to Market in Bio Convergence **Yaakov Diminsky**, Deep-Tech Venture Builder, Israel	
09:00-10:15	Parallel 3: Biomechanics and Human Performance **Chairpersons**: Sara Naftali & Arielle Fischer	Tamar Hall
09:00	Comparative Finite Element Evaluation of a Hybrid Total Wrist Arthroplasty Design: Biomechanical Analysis of Load Transfer and Stress Distribution **Moshe Brand**, Ariel University, Israel	
09:12	From Injury to Performance: Wearable Biomechanics for Improving Human Movement **Arielle Fischer**, Technion Israel Institute of Technology, Israel	

09:24	Reverse Biomimetics of Structural Mechanisms in Soft Biological Composites **Mirit Sharabi**, Ariel University	
09:36	Unified Multimodal E-Skin: A Single-Layer Nanocomposite Platform with Synergistic Tactile, Thermal, and Magnetoreceptive Capabilities **Amos Bardea**, Holon Institute of Technology (HIT)	
09:48	A Wearable Augmented-Reality Eye-Tracking Platform for Multi-Condition Neurological Monitoring, Diagnosis, and Treatment **Liat Eitan**, VisART, Israel	
10:00	An Integrated 3D Platform for Micro- and Nanobubble Cavitation Dynamics under Low-Frequency Ultrasound **Ilia Mezdrokhin**, Tel Aviv University, Israel	
09:00-10:15	Parallel 4: Medical Imaging, Image Processing and Devices **Chairpersons**: Or Perlman & Yosi Hazan	Rimon Hall
09:00	Ultrafast Dynamic Contrast-Enhanced MRI with Flexible Temporal Resolution aided Deep Learning **Eddy Solomon**, Technion Israel Institute of Technology, Israel	
09:12	Revealan™, AI-Enabled Robotic Ultrasound: The "Da Vinci" of the Imaging World **Hadas Ziso**, Endocure, Israel	
09:24	Electromagnetic Sensors for Anatomical Navigation **Amir Weizman**, Quasar, Israel	
09:36	Ultrasound Speed-of-Sound Shift Imaging for Spatiotemporal Monitoring of Clot Formation and Lysis **Shir Gershon**, Tel Aviv University, Israel	
09:48	AI in Molecular Imaging **Zohar Shnaider**, GE Healthcare, Israel	
10:00	Doppler Co-pilot for Vascular Imaging Optimization via Reinforcement Learning **Rafael Meisner**, Technion Israel Institute of Technology, Israel	
10:15-10:45	*Coffee Break*	*Foyer*
10:45-12:00	Plenary 1 **Chairperson**: Shimon Eckhouse	Oren Hall
	Opening Remarks **Shimon Eckhouse -** Founder and Chairman, Alon-Medtech **Amir Landesberg**, ISBME President **Moti Hirsh Meir**, ISBME CEO **Rani Bender**, Haifa City Council Member & Chairman of Haifa Economic Corporation **Sofia Segal**, Conference MC	
	In Memory of Our Dear Friend and Long-Standing ISBME Member, **Zohar Gendler** Honouring his Exceptional Contribution and Years of Dedication to ISBME **Livnat Ben-Zur**, Chief Business & Technology Officer, NGT	
	Keynote Lecture Presented in honour of the late Prof. Yoram Palti, founder of Novocure Novocure: From a Revolutionary Technology to Clinical Applications **Moshe Giladi**, Novocure, Israel	
12:00-13:15	Parallel 5: Optical Technologies & Therapeutic Ultrasound **Chairpersons**: Yoav Shectman & Avinoam Bar-Zion	Hadas Hall
12:00	Separation and Identification of Age-Related Macular Degeneration Protein Biomarkers in Nanochannels **Marzia Iarossi**, Technion Israel Institute of Technology, Israel	
12:10	Symmetric Cancer Spheroid-Fibroblast 3D Organization Revealed and Characterized by PSF-Engineered High-Throughput Microscopy **Noam Zoref**, Technion Israel Institute of Technology, Israel	

12:20	~~Conformal Piezo-Phototronic Optoelectronic Device for Low-Power Wireless Biological Stimulation~~ ~~**Shirley Yitzhak-David**, Technion Israel Institute of Technology, Israel Cancelled~~	
12:30	Real-Time Localization and Control of Anti-Vascular Ultrasound in the Brain **Sharon Katz**, Technion Israel Institute of Technology, Israel	
12:40	Leveraging Nanobubble-Mediated Ultrasound to Improve CAR-T Efficacy in Solid Tumour Treatment **Ariel Werblowsky**, Tel Aviv University, Israel	
12:50	An Advanced Platform for Monitoring Thrombolysis in Small Vessels using Comparative Ultrasound Localization Microscopy **Yarin Gershman**, Tel Aviv University, Israel	
13:00	Non-Invasive Blood Analysis: From Lab to Practice **Or Peleg**, Litebc, Israel	
12:00-13:15	Parallel 6: Go to Market: Lessons from CEO's Experiences **Chairperson**: Amir Ronen	Oren Hall
12:00 -12:10	**Amir Ronen**, CEO, Levron Medical	
12:10 -12:40	**Eran Ganz**, CEO Voll Medical, Founder MCI – MedTech Commercialization Institute	
12:40 -12:50	**Andrei Yosef**, President & General Manager, LTS Device Technologies	
12:50 -13:00	**Imad Younis**, President, Alfa-Omega	
13:00 -13:10	**Assaf Klein**, CEO, Limaca Medical	
12:00-13:15	Parallel 7: Novel Cardiovascular Technologies (1) **Chairpersons**: Michael Kleiner Shochat & Yair Feld	Tamar Hall
12:00	Novel Cardio-Respiratory Physiological Assist Technology for Alleviating Pulmonary Congestion in Patients with Chronic Heart Failure: First-in-Human Study **Amir Landesberg**, Technion Israel Institute of Technology, Israel	
12:12	Lung Impedance Monitoring for Heart Failure Management: From Bioengineering Innovation to Randomized Clinical Proof **Michael Kleiner Shochat**, CardioSet Medical Ltd., Israel	
12:24	Nuclear Strain and Fragility in Beating Cardiomyocytes: Implications for Laminopathies **Daria Pavlov Amiad**, Technion Israel Institute of Technology, Israel	
12:36	Preclinical Evaluation of the MicroSteer FALCON System for Device-Assisted Endoscopic Submucosal Discretion in a Porcine Gastrointestinal Model **Noam Hassidov**, MicroSteer, Israel	
12:48	Sex-Specific Differences in Sinoatrial Node Function Are Driven by Mitochondrial Ca^{2+} Influx **Rami Eid**, Technion Israel Institute of Technology, Israel	
13:00	A Foundation Model of Wearable Pulse Oximetry Reveals Physiological Signatures of Health and Cardiometabolic Risk **Sarah Kohn**, Weizmann Institute of Science, Israel	
12:00-13:15	Parallel 8: Tissue Engineering & Regenerative Medicine **Chairpersons**: Meital Zilberman & Josef Haik	Rimon Hall
12:00	Use of Electrospinning and Different Materials with CEA for Building Skin **Josef Haik**, Sheba Tel Hashomer Medical Center, Israel	
12:12	Advanced Tools to Study Human Physiology **Ben Maoz**, Tel Aviv University, Israel	
12:24	Enhancing Structural and Vascular Stability in Engineered Cardiac Tissues through Material and Cellular Strategies **Shira Landau-Levi**, Technion Israel Institute of Technology, Israel	
12:36	Micro and Nano- Structuring of Hydroxyapatite-MMT Loaded Hydrogels for Bone Regeneration Applications **Tom Hanoon Kogan**, Tel Aviv University, Israel	
12:48	Regenerative Potential of Mesenchymal Stem Cell-Derived Extracellular Vesicles Loaded with PTEN siRNA for Facial Nerve Injury **Ayelet Lotan**, Technion Israel Institute of Technology, Israel	

13:00	Can We Reawaken the Body's Regenerative Capacity? Recreating the Microenvironment for Endogenous Tissue Regeneration **Ishay Attar**, BioChange Ltd., Israel	
13:15-14:30	*Lunch Break, Networking & Poster Session*	*Foyer*
14:30-15:45	Plenary 2: The Leading Future Technologies (Investors/Researchers/Physicians/Hospitals **Chairpersons**: Amir Landesberg & Meital Zilberman	Oren Hall
	Panelists: **Lior Bonfis**, Vice President Operations, Philips, General Manager, Philips, Israel **Shimon Eckhouse**, Founder and Chairman, Alon-Medtech **Uzi Levy**, CEO, MIVNE Real Estate **Yuval Garini,** Executive VP, Innovation & Industrial Relations, Technion **Yosi Shacham-Diamand,** Chief Scientist IBCC Labs **Shai Policker**, Managing Partner, Edge Medical Ventures **Livnat Ben-Zur**, Chief Business & Technology Officer, NGT **Tamar Ben-Zvi**, VP Business Development, Incentive Incubator **Amir Lichter**, Head of Innovation Centre, ARC-CardioVascular	
15:45-17:00	Parallel 9: Nanotechnology & Microfluidic **Chairpersons**: Amit Meller & Tali Ilovitsh	Hadas Hall
15:45	Engineering Nanoscale Hierarchy for Tailored Biomaterial Design **Zohar Arnon**, Ben Gurion University, Israel	
15:57	AI in Cancer Nanomedicine: From Text Mining to Meta-Synergy and Automated Discovery **Yosi Shamay**, Technion Israel Institute of Technology, Israel	
16:09	Ultrasound Mediated Polymerization for Cell Delivery, Drug Delivery, and 3D Printing **Lior Debbi**, Technion Israel Institute of Technology, Israel	
16:21	Analog Leaky Integrate-Amplify-and-Fire Neuron for Biomedical Spiking Networks **Jeries Saleh,** Technion Israel Institute of Technology, Israel	
16:33	Engineering a Mechanoresponsive DNA Origami Capsule for Drug Delivery to Narrowed Arteries **Hadas Omer**, Technion Israel Institute of Technology, Israel	
16:45	Low-Frequency Ultrasound-Enhanced Microdroplet Cavitation for Active Scaffold Modulation in Tissue Engineering **Hen Shenhav**, Tel Aviv University, Israel	
15:45-17:00	Parallel 10: Investor Arena I **Chairperson**: Ariel Sverdlik	Oren Hall
	Panelists: Avi Yaron, Ishay Attar **Ido Goldberg**, Emsight **Doron Bushi,** Fastbreak Medical **Hagit Alon**, KollagenBio **Benny Barak**, Magdent **Gil Senesh**, BeCapio	
15:45-17:00	Parallel 11: Novel Cardiovascular Technologies (II) **Chairpersons**: Moshe Brand & Chen Speter	Tamar Hall
15:45	Biomechanical Characterization of Arteries Using a Novel Pressure–Pressure Loop Approach **Zehava Blechman**, Afeka Academic College of Engineering, Israel	
15:57	Hemodynamic Engineering for Vascular Surgery Challenges **Chen Speter**, Sheba Tel Hashomer Medical Center, Israel	
16:09	Toward Physiological Performance: Reinforced Polymeric Valves with Embedded Fiber Architecture **Omer Tal**, Technion Israel Institute of Technology, Israel	
16:20	Interfacial Fluid Confinement-Based Intravascular Device for Targeted Brain Aneurysm Therapy **Tirosh Mekler**, Technion Israel Institute of Technology, Israel	

16:30	CereNex Medical: A Versatile Intrasaccular System for Enhanced Cerebral Aneurysm Treatment **Reuven Filman**, CereNex Medical, Israel	
16:40	Acunex Vascular Systems: A Catheter-Delivered Continuous Suturing System **Yathreb Asaad-Helou**, Acunex Vascular Systems, Israel	
16:50	ViaOne - Safe Access to the Pericardial Space Utilizing a Blunt Tip Concealed Needle Mechanism **Ziv Menshes**, CardioVia, Israel	
15:45-17:00	Parallel 12: Artificial Intelligence & Deep Learning Applications **Chairpersons**: Yael Yaniv & Danny Eytan	Rimon Hall
15:45	The Deep Learning Revolution in Single-Molecule Localization Microscopy **Yoav Shechtman**, Technion Israel Institute of Technology, Israel	
15:57	Molecular MRI Meets Physics-Guided Deep Learning: From Neurodegeneration Biomarkers to Cancer Treatment Response **Or Perlman**, Tel Aviv University, Israel	
16:09	Label-Free AI-Aided Imaging Flow Cytometry of Cancer Cells **Natan T. Shaked**, Tel Aviv University, Israel	
16:21	Artificial Intelligence as an Infrastructure Component of Modern Cardiology: An Overview of Promising Solutions and Clinical Effectiveness **Igor Grinshteyn**, Point of Care Clinic, Slovenia	
16:33	Physics-Informed Self-Supervised Generative Model for 3D Localization Microscopy **Ofri Goldenberg**, Technion Israel Institute of Technology, Israel	
16:45	X-Ray2CTPA: Leveraging Diffusion Models to Enhance Pulmonary Embolism Classification **Noa Cahan**, Tel Aviv University, Israel	
17:00-17:15	*Short Break*	*Foyer*
17:15-18:30	Parallel 13: Home Care, Telemedicine & Wearable Technologies **Chairpersons**: Zehava Blechman & Michael Hauzer	Hadas Hall
17:15	Command and Control System - Information Continuity Along the Evacuation and Treatment Chain as a Basis for Life-Saving Decision-Making **LTC I.**, Medical Corps, Israel Defence Forces, Israel	
17:30	An Augmented Reality Tool for Obstacle Avoidance Rehabilitation Paradigms **Shachar Maidenbaum**, Ben Gurion University of the Negev, Israel	
17:45	Old Medicine, High-Tech Medicine, The Right Way to Practice Medicine **Amir Shahar**, Tromiyun Tele-Medical Services, Israel	
18:00	Speculate Gynaecology **Or Weis Ginsburg**, Technion Israel Institute of Technology, Israel	
18:15	GerdCare Medical: Israel-Based Digital Therapeutics Innovator Delivering eGERD, a First-in-Class Wearable, Drug-Free GERD Therapy Restoring EGJ Barrier Function and Tackling the Disease at Its Root **Giora Arbel**, Gerdcare Medical, Israel	
17:15-18:30	Parallel 14: Investor Arena II **Chairperson**: Ariel Sverdlik	Oren Hall
	Panelists: Avi Yaron, Ishay Attar **Ziv Menshes**, CardioVia ~~**Ziv Heller**, Alvox Bio Cancelled~~ **Tamir Nahmias**, Crossevia Medical **Hai Zaguri**, FiBreath **Samer Abboud**, Pulsetech	

17:15-18:43	Parallel 15: Biomedical Robotics Surgical Procedure **Chairpersons**: Ilana Nisky	Tamar Hall
17:15	Embedding Human-like Coordination in the Design and Control of Bionic Limbs **Nili Krausz**, Technion Israel Institute of Technology, Israel	
17:35	Bowel Incision Closure with a Semi-Automated Robot-Assisted Laser Tissue Soldering System **Uri Netz,** Ben-Gurion University and Soroka Medical Center, Israel	
17:55	Crossevia Medical is Revolutionizing Cath Lab Interventions with Advanced Access Devices and Enabling Endovascular AI Robotic Navigation **Tamir Nahmias**, Crossevia Medical, Israel	
18:07	Engineering a Self-Regulating Butyrate-Producing Consortium for Gut Diagnostics and Therapy **Valeriia Kravchik,** Technion Israel Institute of Technology, Israel	
18:19	Patient-Specific, Intra-Operative DBS Electrode Localization Using Ultrasound **Talie Mordinson**, Technion Israel Institute of Technology, Israel	
18:31	Engineering and Predicting Genetic Circuits for Bacterial Detection of DNT **Maor Yehezkehely**, Technion Israel Institute of Technology, Israel	
17:15-18:40	Parallel 16: Biomaterials, Drug Delivery & Immunotherapy ` **Chairpersons**: Moran Yadid & Yosi Shama	Rimon Hall
17:15	Magical Wound Healing Compounds **Gideon Meiry,** NTMed, Israel	
17:27	Tailoring the Structure and Antibacterial Properties of Self-Assembled Fmoc-Phenylalanine Nanostructures through Positional Fluorination **Moran Aviv**, Afeka Academic College of Engineering, Israel	
17:39	Hybrid Bioprinting of Vascularized Bone Tissue Using a Thermosensitive, Mechanically Robust Bioink **Majd Machour**, Technion Israel Institute of Technology, Israel	
17:51	Novel Antibiotic-Eluting Gelatin-Alginate Soft Tissue Adhesives for Various Wound Closing Applications **Adaya Shefy Peleg**, Tel Aviv University, Israel	
18:03	Dissolving Microneedles for Systemic and Brain Delivery of Melatonin **Aiman Abu Ammar**, Azrieli College of Engineering, Jerusalem	
18:15	Transmuting Long-Acting Injectables Platforms **Peter Siman**, Intragel, Israel	
18:27	A Novel Device to Enhance the Hemostatic Efficacy of Plasma in Hemorrhagic Events **Einat Swisa**, Plas-Free, Israel	

Poster Presentations

Foyer

1. Analysis of High-Resolution X-Ray Images for Hgb (Hemoglobin) Level Detection
Omri Adler, Rambam Health Care Campus, Israel

2. Biomimetic Insights into the Role of Radial Fibers in Meniscal Deformation and Load Redistribution
Adi Aharonov, Ariel University, Israel

3. Light- and Ultrasound-Induced Antibacterial Properties of Pistacia lentiscus and Laurus Nobilis Leaf Extracts
Tigabu Haddis Ale, Ariel University, Israel

4. An Implantable Nitinol-Based Micro-Actuated Drug Delivery Device
Israel Alexandron, Ben Gurion University of the Negev, Israel

5. An Active Nitinol-Based Orthosis to Facilitate Mobility in Patients with Drop Foot
Israel Alexandron, Ben Gurion University of the Negev, Israel

6. Long-Term Learning Analysis Via Image Processing and Kinematic Analysis in Knot-Tying Task
Raz Am Shalem, Ben Gurion University of the Negev, Israel

7. Engineering a 3D-Bioprinted Model for In Vitro Cancer Research
Adi Amrusi, Technion Israel Institute of Technology, Israel

8. Expanding VR Exposure Therapy for PTSD to Civilian Scenarios
Bsant Anabosy, Ben Gurion University of the Negev, Israel

9. Mechanical Ventilation Induced Increase in Intrapulmonary Postcapillary Resistance Play Key Role in Diminishing Left Ventricle Filling and Cardiac Output
Ofri Andriesse, Technion Israel Institute of Technology, Israel

10. From High Flow to Healthy Perfusion: A Turbulent Flow Simulation of Arteriovenous Fistula Steal Syndrome Treatments
Galina Antonov, Ariel University, Israel

11. Tasks Design and Evaluation of Bimanual Interaction with Real-World Soft Elastic Objects in Robot-Assisted Minimally Invasive Surgery
Shani Arusi, Ben Gurion University of the Negev, Israel

12. Multimodal Haptic Interfaces for Upper-Limb Prosthetics: Integrating Force and Thermal Feedback
Barak Arvili, Ariel University, Israel

13. Illuminating the Underlying Mechanism of Intracellular Optoelectronic Modulation Using Silicon Nanowires
Tania Assaf, Technion Israel Institute of Technology, Israel

14. Mechanical Properties and Stress Shielding Analysis of Ti-6Al-4V TPMS lattice made via SLM for hip implant Application
Chen Atias, Ariel University, Israel

15. Acceleration of Molecular Cardiac MRI using a Physics-Aware Vision Transformer
Hadas Avraham, Tel Aviv University, Israel

16. Anatomical Token Uncertainty for Transformer-Guided Active MRI Acquisition
Lev Ayzenberg, Tel Aviv University, Israel

17. Development of Sports Protectors Based on 3D-Printed Anisotropic Lattices
Claude Azaria, Ariel University, Israel

18. Similarly Fluent? Similarity Analysis in Children with Epilepsy and Children with Dyslexia in Relation to Reading Fluency: An fMRI Study
Marwan Bebar, Technion Israel Institute of Technology, Israel

19. Quantitative AI-Boosted Molecular Magnetic Resonance Fingerprinting of Lipids and Macromolecules in Multiple Sclerosis In Vivo
Ruth Ben Chaim, Tel Aviv University, Israel

20. Predictive Sensor Fusion Architecture for CPG-Driven Lower-Limb Exoskeleton Gait Control
Tal Ben Eli, Ariel University, Israel

21. Digital Implementation of a Scalable Virtual-Cell Framework
Yael Ben Nahum, Technion Israel Institute of Technology, Israel

22. Targeted Therapeutic Release via Ultrasound Nanodroplets for Tumour Therapy
Tiran Bercovici, Tel Aviv University, Israel

23. Leadless Optoelectronic Artificial Axons for Studying Activity-Dependent Myelination
Alexander Borodetsky, Technion Israel Institute of Technology, Israel

24. A Data-Driven Approach for SFA Restenosis Prediction: Integrating Patient-Specific CFD and Machine Learning
Moshe Brand, Ariel University, Israel

25. Daily Living Gait Measures Derive from Wrist Accelerometers and a Deep Learning Pipeline are Associated with Postmortem Brain Pathologies
Yonatan Brand, Tel Aviv University, Israel

26. AI-Driven Patient Phenotyping for ICU Nutrition
Eden Breen, Ariel University, Israel

27. Ophthalmology foundation models for clinically significant age macular degeneration detection
Benjamin A. Cohen, Technion Israel Institute of Technology, Israel

28. Novel Edible Bioinks for Cultivated Meat: Evaluating Feasibility and Effects on Intestinal Epithelium
Shlomit David, Technion Israel Institute of Technology, Israel

29. Guiding Epidural Needle Insertion Training with Task-Specific Metrics and Motor Control Principles
Nitsan Davidor, Ben Gurion University of the Negev, Israel

30. Parallel and Targeted Cell Electroporation via Optoelectronic Ally Controlled Janus Micromotors
Srikanta Debata, Tel Aviv University, Israel

31. Compact 3D Imaging Flow Cytometry for Volumetric Analysis of Nanoparticle Uptake
Roni Ehrlich, Technion Israel Institute of Technology, Israel

32. Vascular Inflammatory Signalling at the Blood–Brain Barrier: A Model for Hypertensive Neurovascular Injury
Reem Fahmawi, Technion Israel Institute of Technology, Israel

33. Development of a Novel Sensor-Integrated Eight-Plate for Adolescent Limb Deformity Correction
Nirel Fedida, Ariel University, Israel

34. Multiparameter Uncertainty Mapping in Quantitative Molecular MRI by a Physics-Structured Variational Autoencoder (PS-VAE)
Alex Finkelstein, Tel Aviv University, Israel

35. 3D Printed Vascularized Tissue Flaps Enabling Direct Anastomosis for Reconstructive Clinical Applications
Eliana Fischer, Technion Israel Institute of Technology, Israel

36. Numerical analysis of the hemodynamics and performance of miniature ventricular assist devices
Yuval Gabso, Ariel University, Israel

37. Targeting Ubiquitin Signalling: A Novel Cyclic Peptide Therapy for Multiple Myeloma
Dima Ghannam Shahbari, UB Therapeutics, Israel

38. A Novel Active Transparent Model for In-Vitro PIV Investigation of Left Ventricular Hemodynamics.
Itamar Goshen, Ariel University, Israel

39. Super-Resolution Intracellular Ultrasound Imaging using Blinking Nanodroplets
Saar Gotshal, Tel Aviv University, Israel

40. Leveraging Symmetrical Flow Matching for Source-Free Domain Adaptation in Medical Image Segmentation
Tal Grossman, Tel Aviv University, Israel

41. CERNAL: A Transcriptome-Driven Compiler for RNA-Based Cellular Logic Circuits
Mor Gurwicz, Tel Aviv University, Israel

42. Experimental Quantification of Three-Dimensional, Time-Resolved Fluid–Structure Interaction in a Left-Ventricular Phantom
Omer Hadar, Tel Aviv University, Israel

43. Leadless Biomechanical Innovative Technologies for Cardiac Repair
Layan Habib, Technion Israel Institute of Technology, Israel

44. Visualizing Vascular Bone Marrow Niche Alterations in Diabetes
Narmeen Haj, Technion Israel Institute of Technology, Israel

45. Advanced Signal Processing and Multi-Criteria Ranking Framework for Cuffless Systolic Blood Pressure Estimation Based on Photoplethysmography (PPG) Signal Analysis
Ami Hauptman, Afeka Academic College of Engineering in Tel Aviv, Israel

46. Multi-Contrast Generation and Quantitative MRI using a Transformer-Based Framework with RF Excitation Embeddings
Sahar Ifrah, Tel Aviv University, Israel

47. Brightfield Snapshot 3D Microscopy: Towards In-Vivo Imaging
Leen Ileimi, Technion Israel Institute of Technology, Israel

48. A 3D Bioprinted Vascularized, Perfusable Intestinal Model for Drug Evaluation and Disease Modeling
Adina Israel Fried, Technion Israel Institute of Technology, Israel

49. Exploring Genome Organization at the Nanometric Scale in the Cell Nucleus
Rand Kamal, Technion Israel Institute of Technology, Israel

50. Ultrasonic Speed-of-Sound Shift Imaging for Microbubble-Mediated Therapeutic Applications
Keren Tchelet Karlinsky, Tel Aviv University, Israel

51. Exploring the Distance-Dependent Mechanical Communication During Sprouting Angiogenesis
Oryan Karni, Technion Israel Institute of Technology, Israel

52. Toward Patient-Specific Optimization of Systemic-to-Pulmonary Shunts in Single-Ventricle Physiology
Adi Konsens, Tel Aviv University, Israel

53. Three-Dimensional Magneto Responsive Scaffolds for Remote Cellular Stimulation
Ekaterina Kuznetsova, Tel Aviv University, Israel

54. Medical Device Lifecycle and Regulatory Compliance Diagram
Shay Leventhal Gabay, RA360 Consulting, Israel

55. Cellulose Fibres Enhance the Function of Hemostatic Composite Medical Sealants
Inbar Levi, Tel Aviv University, Israel

56. Selective Targeting of Non-Small Cell Lung Cancer in Three-Dimensional Models by Non-Thermal Millimetre-Wave Irradiation
Stella Liberman-Aronov, Ariel University, Israel

57. Biomechanics Modelling of Traumatic Spinal Cord Injury Due to Ischemia
Guy Lilling, Tel Aviv University, Israel

58. Virtual Reality Systems for Treating PTSD: Israeli-Tailored Prolonged Exposure and Place Attachment Therapy
Shachar Maidenbaum, Ben Gurion University, Israel

59. Effects of Arterial Wall Roughness and Mechanical Stiffness on Hemodynamics in 3D-Printed Vessel Models
Shai Maman, Afeka Academic College of Engineering in Tel Aviv, Israel

60. Biomimetic Silk-Reinforced IPN Hydrogel Composite Tubular Constructs for Coronary Artery Replacement: Mechanical Performance
Dekel Maroz, Ariel University, Israel

61. Soft Tissue Hybrid Bioprinting for Tissue Engineering Using a PLGA-Particle Reinforcement Bioink
Roy Meretzki, Technion Israel Institute of Technology, Israel

62. Quantitative Monitoring of Immunotherapy Treatment Response in Paediatric Tumours Using Molecular CEST MRI
Ron Moneta, Tel Aviv University, Israel

63. Biomechanics Modelling of Traumatic Spinal Cord Injury Due to Haemorrhage
Ilana Nachshon, Tel Aviv University, Israel

64. Benchmarking AI Against Expert Ophthalmologists for Clinical Detection of Referable Eye Diseases
Renee Najman, Technion Israel Institute of Technology, Israel

65. Enhancing Drug Permeability into Solid Tumours Via Opto-Electronic Silicon Nanowires Mediated Electroporation
Dana Nir, Technion Israel Institute of Technology, Israel

66. Combining Supramolecular and Covalent Chemistry to form versatile Reinforced Fibrillar Network Hydrogels from Fibrin and Methacrylated Fibrinogen
Noa Notea-Debutton, Technion Israel Institute of Technology, Israel

67. Programmable Hybrid Systems for Targeted Cancer Therapy: Integrating Engineered Bacteria and Mammalian Cells
Siraj Nsraldeen Halabi, Technion Israel Institute of Technology, Israel

68. Early Detection of CAR-T-Associated Neurotoxicity via Cytokine Monitoring in Serum
Amit Parizat, Technion Israel Institute of Technology, Israel

69. Selective Anti-Cancer Influence of Millimetre-Wave Irradiation on Solid Tumour Viability and Division
Dhavalkumar Patel, Ariel University, Israel

70. Design of Bioactive Titanium Porous Structures via Binder Jetting, Partial Sintering and Surface Modification
Vladimir Popov, Ariel University, Israel

71. Fiber-Oriented Composite Design for Biomimetic Aortic Valves
Yana Portnov, Ariel University, Israel

72. Development of a Human Cardiac-Lymphatic Organ-on-a-Chip Platform for Modelling Lymphatic Drainage in Engineered Heart Tissue
Gabriella Roach, Technion Israel Institute of Technology, Israel

73. Quantitative Assessment of Early Post-Type 2 Myocardial Infarction Remodelling
Maya Rom, Technion Israel Institute of Technology, Israel

74. Intracellular Ca^{2+} Modulates PKA Compartmentalization and Dynamics in Human iPSC-Derived Cardiomyocytes
Anat Rotschield, Technion Israel Institute of Technology, Israel

75. The Effect of Aortic Valve Stenosis on the Hemodynamic of the Coronary Arteries
Sofia Runshteyn, Ariel University, Israel

76. Beyond Glucose: Evidence that ^{18}F-FDG PET Underestimates Bone Marrow Activation in Diabetes
Dareen Saab, Technion Israel Institute of Technology, Israel

77. Integrated Cardiac Vascular Organ-On-A-Chip Platform For Dissecting Macrophage-Lineage Mechanisms In Human Heart Tissue
Roni Sadeh, Technion Israel Institute of Technology, Israel

78. Studying Fluorescent Properties of Olive Carbon Dots using Time-Resolved Fluorescence Measurements
Ulugbek Saidvaliev, Tel Aviv University, Israel

79. Fiber-Reinforced Interfaces Enhance Mechanical Integrity in Biomimetic Intervertebral Discs
Haim Salim Mordechai, Ariel University, Israel

80. Vortex-Driven Perfusion: The Impact of Aortic Root Hemodynamics on Coronary Flow in Aortic Stenosis and Valve Replacements
Oren Salimi, Ariel University, Israel

81. Synthetic Modular Contact-Dependent Microbe-to-Mammalian Communication
Roee Samuel, Technion Israel Institute of Technology, Israel

82. End-to-End Joint Optimization of Z-Encoding Phase Mask and Z-Stack Reconstruction for Single-Shot 3D Fluorescence Microscopy
Danielle Sapir, Technion Israel Institute of Technology, Israel

83. Integration of MRI and Computational Hemodynamic Modelling for the Assessment of Human Placental Vasculature and Function
Dana Schonberger, Tel Aviv University, Israel

84. Seaweed-derived Cellulose Scaffolds: A Novel Platform for Mammalian Cell Cultures with 3D Infiltration and Proliferation
Orna Sharabani-Yosef, Tel Aviv University, Israel

85. Structural Motifs Promote Tear Resistance and Flaw Tolerance in Silk Fibroin–Alginate Bio Composites
Smadar Sharon, Ariel University, Israel

86. An Abdominal Aortic Aneurysm Micro-Physiological Model for the Study of Localized Therapeutics
Suzan Shehday, Technion Israel Institute of Technology, Israel

87. Automated Detection of Freezing of Gait in Complex Environments From simple 2D Video Using Spatiotemporal Graph Convolutional Networks
Arik Shkolnikov, Tel Aviv University, Israel

88. A Robotic Platform for Surgical Site Infection Simulation
Yael Shlomo, Tel Aviv University, Israel

89. Skeletal Muscle-Derived Extracellular Vesicles and Their Impact on Glucose Regulation in Type 2 Diabetes
Hagit Shoyhet, Technion Israel Institute of Technology, Israel

90. Acunex Vascular Systems: A Catheter-Delivered Continuous Suturing System for Durable EVAR Graft Fixation
Areen Shtewe, Acunex Vascular Systems, Israel

91. Bioengineered Human Neurovascular Unit: A Perfusable In Vitro Platform
Rita Shuhmaher Bialik, Technion Israel Institute of Technology, Israel

92. Architected Hybrid Scaffolds for Patient-Specific, Mechanically Compliant Breast Tissue Engineering
Asaf Silverstein, Technion Israel Institute of Technology, Israel

93. Macroscopic Fourier-Based Spectral Imaging for Biopsy Analysis and Diagnosis
Adam Soker, Technion Israel Institute of Technology, Israel

94. Engineering a Fetal-Like Wound Microenvironment: Controlled TGF-β3 Delivery via FibMA Hydrogel Reduces Adult Skin Fibrosis
Victoria Teichman, Technion Israel Institute of Technology, Israel

95. Cell-Cell Interactions in Bio Printed Vascularized Composite Soft Tissue Flaps with an Integrated Arterial-Venous Loop
Anna Tsukerman, Technion Israel Institute of Technology, Israel

96. Improving Ligamentum Flavum Haptic Rendering in a Bimanual Epidural Needle Insertion Simulator
Mohamad Usman, Ben Gurion University of the Negev, Israel

97. Simulations and Classification of Flow Fields in Different Umbilical Cord Models
Anna Vassart, Afeka College of Engineering, Israel

98. End-to-End Deep-Learning-Based Discovery of Quantitative Molecular MRI Acquisition Protocols
Nikita Vladimirov, Tel Aviv University, Israel

99. A Novel Approach for Electrophysiological Profiling of Cardiac Organoids Using Spatiotemporal Analysis and Beat Rate Variability
Ido Weiser-Bitoun, Rambam Health Care Campus, Israel

100. A High-Throughput Perfusable Platform for Generating Vascularized Tissues
Maya Yaakov, Technion Israel Institute of Technology, Israel

101. A Microfluidic Nanoliter-Well Platform for Direct-from-Sample Rapid Phenotypic Antimicrobial Susceptibility Testing
Idan Yelin, Technion Israel Institute of Technology, Israel

102. Predicting Subject-Specific fMRI Activation Maps from Cognitive Profiles using a Spatial Basis Decomposition
Ori Zehngut, Technion Israel Institute of Technology, Israel

103. Combined Discrete Wavelet Transform and Machine Learning from Reflectance Spectra for Screening Types of Skin Cancer in Patients
Yoav Zuntz, Ariel University, Israel