



ACIBADEM
MEHMET ALİ AYDINLAR
UNIVERSITY

EMK 2025

27. ULUSAL ELEKTRON
MİKROSKOPİ KONGRESİ

27TH NATIONAL CONGRESS
OF ELECTRON MICROSCOPY

MSC 2025

2ND INTERNATIONAL MICROSCOPY
AND SPECTROSCOPY CONGRESS

2. ULUSLARARASI MİKROSKOPİ
VE SPEKTROSKOPİ KONGRESİ

25-27 EYLÜL 2025 / 25-27 SEPTEMBER 2025

ACIBADEM MEHMET ALİ AYDINLAR ÜNİVERSİTESİ TIP FAKÜLTESİ,
HİSTOLOJİ VE EMBRİYOLOJİ ANABİLİM DALI ATAŞEHİR, İSTANBUL

ACIBADEM MEHMET ALİ AYDINLAR UNIVERSITY SCHOOL OF
MEDICINE, DEPARTMENT OF HISTOLOGY AND EMBRYOLOGY ATAŞEHİR, İSTANBUL

MSC 2025 BIOLOGICAL SCIENCES PROGRAMME

SEPTEMBER 25, 2025		SEPTEMBER 26, 2025		SEPTEMBER 27, 2025	
08:30-17:00	REGISTRATION	08:30-17:00	REGISTRATION	08:30-17:00	REGISTRATION
09:00-14:00	MICROSCOPY SCHOOL	09:00-09:40	PLENARY LECTURE 2 - Conference Hall Chairs: Güldal Süyen, Merve Elmas	09:00-09:40	PLENARY LECTURE 3 - Conference Hall Chairs: Feray Bakan Mısırlıoğlu, Mehtap Kutlu
			The Role of Astroglia in the Generation and Prevention of Seizures Emre Yakşi		AI-based Advances in Biomedical Microscopy and Pathology Aydoğan Özcan - ZOOM
		09:40-10:10	COFFEE BREAK	09:40-10:00	COFFEE BREAK
		10:10-12:10	PARALLEL SESSIONS	10:00-12:30	PARALLEL SESSIONS
			BS Session 3 - Cell I - Conference Hall Chairs: Oya Evirgen, Meltem Müftüoğlu		BS Session 9 - Cell III - Conference Hall Chairs: Selma Yılmazzer, Fatma Kaya Dağıstanlı
			BS Session 4 - Cell II - D1 Hall Chairs: Beki Kan, Agnes Kittel		BS Session 10 - Microbiology - D1 Hall Chairs: Engin Yenilmez, Özgür Kurt
			Lipid Droplets and Nuclear Structures Toyoshi Fujimoto - ZOOM (Invited)		The Mitochondrial Relay with the Nucleus: Form and Function Michelangelo Campanella - ZOOM (Invited)
			The Heterogeneous Blueprint: Regional Mapping of the Human Amniotic Membrane and Its Implications in Fundamental Research and Translation Roberta Di Pietro - ZOOM (Invited)		Condensates that Control Transcription Factor Dimerization Batu Erman (Invited)
			Life Sciences Applications on FIB-SEM Volkan Erkut (Invited)		Resolving Subcellular Structure Alterations in Cancer with (Correlative) Light and Electron Microscopy Nalan Liv (Invited)
			Oral Presentations (0055, 0062)		Rewiring of Organelle Ultrastructure in HER2-Positive Breast Cancer Revealed through Volume Electron Microscopy Lakshmi Edakkandiyil (Invited)
					Visualizing the Mechanism of Action of Newly Developed Wide Spectrum Peptide Antibiotics by Electron Microscopy Tanıl Kocagöz (Invited)
					The Role of Microscopy in the Diagnosis of Parasitic Diseases Ahmet Özbilgin (Invited)
					Investigating Virus Infection Mechanisms in Situ Caner Akıl (Invited)
					Decoding the Replication Machinery of Nipah Virus: Structural and Molecular Insights Esra Balıkcı Akıl (Invited)
					Global Air Isolated Workflow Solution for Battery Analysis: From Cryo FIB to TEM Nicolas Ravier (Invited)
14:00-14:45	OPENING CEREMONY - Conference Hall	12:10-13:30	POSTER SESSION - Exhibition Hall	12:30-13:30	LUNCH
14:45-15:30	KEY NOTE LECTURE - Conference Hall Chairs: Serap Arbak, Servet Turan	13:30-14:30	LUNCH	13:30-15:30	BS Session 11- Organoids - Conference Hall Chairs: Dilek Akakin, Gamze Tanrıverdi
	Unlocking the Power of SEM: Quantitative Imaging and 4D Diffraction Across Disciplines Vladislav Krzyzanek - President of the European Microscopy Society	14:30-16:30	PARALLEL SESSIONS		Human Kidney Organoids to Model Glomerular Disorders and Kidney Fibrosis Jitske Jansen - ZOOM (Invited)
			BS Session 5 - Cell Death - Conference Hall Chairs: Gözde Erkanlı Şentürk, Figen Kaymaz		Recent Advances in 3D Cell Culture: Revolutionizing Drug Discovery and Disease Modeling Through Advanced Technologies Ranan Gülhan Aktaş (Invited)
			BS Session 6 - Advanced Microscopy Techniques - D1 Hall Chairs: Naoto Kawakami, Esra Erdemli		Enhanced Human Placenta Organoids with Immune and Vascular Components for In Vivo-Like Function, Disease Modeling, and Therapeutic Testing Çiler Çelik Özenci (Invited)
			Life Super-Resolution Imaging of Programmed Cell Death Barbara Conradt (Invited)		Genetics and Modeling of Neurological Disorders Kaya Bilgüvar (Invited)
			Can we Increase the Therapy Response of Brain Tumors by Epigenetic Interventions? Tuğba Bağcı Önder (Invited)		
			Hydra Bio Plasma-FIB Technologies for Multidisciplinary Research Meltem Sezen Özkoç (Invited)		
			Cryogenic TEM Sample Holder and MEMS-Chips Development for In Situ Cooling, Heating and Biasing Applications David Westmoreland (Invited)		
			Intravital Imaging of Lymphocytes Using Multi-Photon Microscopy Naoto Kawakami (Invited)		
			Microscopy in Transition: From Optical Lenses to Intelligent Algorithms Serçin Karahüseyinoğlu (Invited)		
			Fast and Gentle Live Imaging with Spinning Disk Confocal Microscopy in Life Sciences Rahul Kumar (Invited)		
			Redefining 2D/3D Imaging: Introducing new 120kV TEM Gaurav Sharma (Invited)		
15:30-16:00	COFFEE BREAK	16:30-17:00	COFFEE BREAK	15:30-15:45	COFFEE BREAK
16:00-16:40	PLENARY LECTURE 1 - Conference Hall Chairs: Melek Öztürk, Deniz Yücel	17:00-19:00	PARALLEL SESSIONS	15:45-17:30	ORAL PRESENTATIONS
	AI-Powered 3D Cell-Level Imaging for Disease Studies and Therapeutic Development Ali Ertürk		BS Session 7 - Biomaterials - Conference Hall Chairs: İpsita Roy, Halime Kenar		OP Session 2 - Tissue and Systems II - D1 Hall Chairs: Özlem Tuğçe Çilingir Kaya, Esin Yuluğ (0067, 0075, 0087, 0064, 0093, 0102)
16:40-18:40	PARALLEL SESSIONS		BS Session 8 - Developmental Biology - D1 Hall Chairs: Feriha Ercan, Abit Aktaş		OP Session 3 - Biomaterials - D2 Hall Chairs: Duygu Gök Yurtseven, Başak Işıldar (0106, 0083, 0088, 0022)
	BS Session 1 - Neuroscience - Conference Hall Chairs: Özhan Eyigör, Filiz Onat		Biomimetic Bioprinting for Tissue/Organ Engineering Bahattin Koç (Invited)		OP Session 4 - Microscopy Techniques - D2 Hall Chairs: Elif Kervancıoğlu Demirci, Merve Elmas (0033, 0099, 0034, 0059)
	BS Session 2 - Cancer - D1 Hall Chairs: Gamze Güney, Gamze Tanrıöver		Morphological and Epigenetic Outcomes in a Mouse Model of Assisted Reproductive Technologies Marisa Bartolomei - ZOOM (Invited)		
	Uncoupling of Aging from Cancer Propagation by Hypothalamic Feeding Circuits Involving the Immune System Tamas Horvath - ZOOM (Invited)		Natural and Sustainable Polymers of Bacterial Origin and Their Biomedical Applications Ipsita Roy (Invited)	17:30-18:00	CLOSING AND AWARD CEREMONY
	Blood-Brain Barrier as an Obstacle in the Treatment of Neurodegenerative Diseases; Current Considerations and Novel Approaches Bülent Ahışalı (Invited)		Morphological Evaluation of Biomolecule-Conjugated Nanomedicine Platforms Özgül Gök Özatay (Invited)		
	Visualizing Nervous System Regeneration in Zebrafish. Stefan H. Fuss (Invited)		Theranostics Bükem Tanören (Invited)		
	Oral Presentations (0079)		OP Session 1 - Tissue and Systems I - D1 Hall Chairs: Deniz Yücel, Pınar Köroğlu (0028, 0046, 0027, 0115, 0116)		
19:00	WELCOME RECEPTION	20:00	GALA DINNER		

