

**Oral Presentations** 

(0079)

19:00

**WELCOME RECEPTION** 

20:00



# EMK 2025 MSC 2025

### 27. ULUSAL ELEKTRON MİKROSKOPİ KONGRESİ

27<sup>TH</sup> NATIONAL CONGRESS OF ELECTRON MICROSCOPY

## **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 SCI   | IENCES 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        |   |  | 09:00-09:40  | PLENARY LECTURE 2 - Conference Hall Chairs: Güldal Süyen, Merve Elmas   |  | 09:00-09:40  | PLENARY LECTURE 3 - Conference Hall<br>Chairs: Feray Bakan Mısırlıoğlu, Mehtap Kutlu  |   |
|                    |   |  | The Role of Astroglia in the Generation and Prevention of Seizures  Emre Yakşi |   |  | Al-based Advances in Biomedical Microscopy and Pathology <b>Aydoğan Özcan - ZOOM</b> |   |   |
|                    |   |  | 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 -<br>Conference Hall<br>Chairs: Oya Evirgen, Kamila Hrubanova   | BS Session 4 - Cell II -<br>D102 Hall<br>Chairs: Beki Kan, Agnes Kittel  |  | BS Session 9 - Cell III -<br>Conference Hall<br>Chairs: Selma Yılmazer, Fatma Kaya Dağıstanlı   | <b>BS Session 10 - Microbiology -</b><br><b>D102 Hall</b><br>Chairs: <b>Engin Yenilmez, Özgür Kurt</b>  |
|                    | MICROSCO  | PY SCHOOL  |  | Lipid Droplets and Nuclear Structures  Toyoshi Fujimoto - ZOOM (Invited)  | Revisiting the Human Umbilical Cord. Unique Cells in a Surprisingly Fibrous Stroma <b>Alp Can (Invited)</b>  |  | The Mitochondrial Relay with the Nucleus: Form and Function Michelangelo Campanella - ZOOM (Invited)  | Investigation of Mechanism of Action of Newly Developed Wide Spectrum Peptide Antibiotics by Electron Microscopy <b>Tanıl Kocagöz (Invited)</b> |
|                    |   |  |  | The Heterogeneous Blueprint: Regional Mapping of the Human Amniotic Membrane and Its Implications in Fundamental Research and Translation | Imaging Gene Transcription Pavel Hozak (Invited)   |  | Condensates that Control Transcription Factor Dimerization  Batu Erman (Invited)  | The Role of Microscopy in the Diagnosis of Parasitic Diseases <b>Ahmet Özbilgin (Invited)</b>   |
|                    |   |  |  | Roberta Di Pietro - ZOOM (Invited)  Life Sciences Applications on FIB-SEM  Volkan Erkut (Invited)   | Deciphering the Secrets of Extracellular Vesicles or the Limits of Classical TEM Examinations  |  | Resolving Subcellular Structure Alterations in Cancer with (Correlative) Light and Electron Microscopy  Nalan Liv (Invited)   | Investigating Virus Infection Mechanisms in Situ Caner Akıl (Invited)   |
|                    |   |  |  | Oral Presentations (0055, 0062)   | Agnes Kittel (Invited)  Exosomes: Tiny Packages, Transformative Potential Biogenesis and Their Role in Medicine  |  | Rewiring of Organelle Ultrastructure in HER2-Positive Breast<br>Cancer Revealed through Volume Electron Microscopy<br><b>Lakshmi Edakkandiyil (Invited)</b>   | Decoding the Replication Machinery of Nipah Virus: Structural and Molecular Insights  Esra Balıkçı Akıl (Invited)                               |
| 14:00-14:45        | OPENING CEREMONY - Conference Hall  |  | 12:10-13:30  | Seda Vatansever (Invited)  POSTER SESSION - Exhibition Hall   |  |  | Visualization of EV Biogenesis and Secretion Using Advanced Light and Electron Microscopy  Zahra Elly Soltani (Invited)   | Global Air Isolated Workflow Solution for Battery Analysis:<br>From Cryo FIB to TEM<br><b>Felice D'Alia (Invited)</b>                           |
|                    | Opening and Welcoming   |  | 13:30-14:30  | LU  | NCH  | 12:30-13:30  |   | UNCH  |
|                    | Moment of Silence   |  | 14:30-16:30  | PARALLEI  | L SESSIONS   | 13:30-15:30 BS Session 11- Organoids -   |   |   |
|                    | National Anthem   |  |  | BS Session 5 - Cell Death -<br>Conference Hall<br>Chairs: Gözde Erkanlı Şentürk, Figen Kaymaz   | BS Session 6 - Advanced Microscopy Techniques -  | !<br>!   | Conference Hall<br>Chairs: Dilek Akakın, Gamze Tanrıverdi   |   |
|                    | <b>Prof. Dr. Serap Arbak</b> Chair-MSC 2025 and EMK 2025 / President-Turkish Society for Electron Microscopy  |  |  |   | <b>D102 Hall</b><br>Chairs: <b>Naoto Kawakami, Esra Erdemli</b>  |  | Human Kidney Organoids to Model Glomerular Disorders and Kidney Fibrosis  Jitske Jansen - ZOOM (Invited)  Recent Advances in 3D Cell Culture: Revolutionizing Drug Discovery and Disease Modeling Through Advanced Technologies  Ranan Gülhan Aktaş (Invited) |   |
|                    | <b>Prof. Dr. Güldal Süyen</b> Vice Rector- Acıbadem Mehmet Ali Aydınlar University  |  |  | Life Super-Resolution Imaging of Programmed Cell Death<br>Barbara Conradt (Invited)   | Intravital Imaging of Lymphocytes Using Multi-Photon<br>Microscopy<br><b>Naoto Kawakami (Invited)</b>  |  |   |   |
|                    | Gizem Kosif (Piano) & (   | Music Performance Gizem Kosif (Piano) & Can Gözüm (Saxophone)  |  | Can we Increase the Therapy Response of Brain Tumors by Epigenetic Interventions?  Tuğba Bağcı Önder (Invited)                            | Microscopy in Transition: From Optical Lenses to Intelligent<br>Algorithms<br><b>Serçin Karahüseyinoğlu (Invited)</b>  |  | Enhanced Human Placenta Organoids with Immune and Vascular Components for In Vivo-Like Function, Disease Modeling, and Therapeutic Testing <b>Çiler Çelik Özenci (Invited)</b>  |   |
|                    | Tango Dance Performance Melis Aydın & Barış Karahasan   |  |  | Hydra Bio Plasma-FIB Technologies for Multidisciplinary   | Fast and Gentle Live Imaging with Spinning Disk Confocal   |  | Genetics and Modeling of Neurological Disorders  Kaya Bilgüvar (Invited)  |   |
| 14:45-15:30        | KEY NOTE LECTURE - Conference Hall Chairs: Serap Arbak, Servet Turan Unlocking the Power of SEM: Quantitative Imaging and 4D Diffraction Across Disciplines           |  |  | Research  Meltem Sezen Özkoç (Invited)  Cryogenic TEM Sample Holder and MEMS-Chips Development  | Microscopy in Life Sciences Rahul Kumar (Invited)  t Redefining 2D/3D Imaging: Introducing new 120kVTEM  |  |   |   |
|                    |   | f the European Microscopy Society  |  | for In Situ Cooling, Heating and Biasing Applications  David Westmoreland (Invited)   | Gaurav Sharma (Invited)  | 15:30-15:45  | COFF  | EE BREAK  |
| 15:30-16:00        | COFFEE BREAK  |  | 16:30-17:00  | COFFEI  | E BREAK  | 15:45-17:30  | ORAL PR   | ESENTATIONS   |
| 16:00-16:40        | Chairs: Melek Öz  | PLENARY LECTURE 1 - Conference Hall Chairs: Melek Öztürk, Deniz Yücel  |  | BS Session 7 - Biomaterials -   | L SESSIONS<br>BS Session 8 - Developmental Biology -   |  | OP Session 2 - Tissue and Systems II - D102 Hall<br>Chairs: Özlem Tuğçe Çilingir Kaya, Esin Yuluğ<br>(0067, 0075, 0087, 0064, 0093, 0102)   | <b>OP Session 3 - Biomaterials - D103 Hall</b><br>Chairs: <b>Duygu Gök Yurtseven, Başak Işıldar</b><br>(0106, 0083, 0088, 0022)                 |
| 16:40-18:40        | Ali E   | rtürk  SESSIONS  |  | Conference Hall Chairs: İpsita Roy, Halime Kenar Biomimetic Bioprinting for Tissue/Organ Engineering                                      | D102 Hall Chairs: Feriha Ercan, Abit Aktaş  Morphological and Epigenetic Outcomes in a Mouse Model of  |  |   | OP Session 4 - Microscopy Techniques - D103 Hall<br>Chairs: Elif Kervancıoğlu Demirci, Merve Elmas<br>(0033, 0099, 0034, 0059)                  |
|                    | BS Session 1 - Neuroscience - BS Session 2 - Cancer - Conference Hall D102 Hall   |  |  | Bahattin Koç (Invited)  | Assisted Reproductive Technologies  Marisa Bartolomei - ZOOM (Invited)   | 17:30-18:00  | CLOSING AND AWARD CEREMONY  |   |
|                    | Chairs: Özhan Eyigör, Filiz Onat  Coupling of Aging from Cancer Propagation by bothalamic Feeding Circuits Involving the Immune System  Sevin Turcan - ZOOM (Invited) |  |  | Natural and Sustainable Polymers of Bacterial Origin and Their Biomedical Applications  Ipsita Roy (Invited)                              | Pushing the Boundaries of Developmental Biology: A Technological Tour de Force in Creating True Interspecies Hybrids with Both a Hybrid Genome and Hybrid Cytoplasm Leyla Satı (Invited) |  | Confe   | rence Hall  |
|                    | Tamas Horvath - ZOOM (Invited)  Blood-Brain Barrier as an Obstacle in the Treatment of Neurodegenerative Diseases; Current Considerations and Novel Approaches        | Barrier as an Obstacle in the Treatment of Multiomics in Minutes: The Next Frontier of Non-Invasive Cancer Diagnostics |  | Morphological Evaluation of Biomolecule-Conjugated<br>Nanomedicine Platforms<br>Özgül Gök Özatay (Invited)                                | OP Session 1 - Tissue and Systems I - D102 Hall<br>Chairs: Deniz Yücel, Pınar Köroğlu<br>(0028, 0046, 0027, 0115, 0116)  |  | MSC 2025 IS SPONSORED BY  |   |
|                    | Bülent Ahıshalı (Invited)   |  |  | Theranostics  Bükem Tanören (Invited)   |  |  | EUROPEAN MICROSCOPY<br>SOCIETY  |   |
|                    | Visualizing Nervous System Regeneration in Zebrafish.  Stefan H. Fuss (Invited)  Oral Presentations (0031, 0037, 0096, 0044)  |  |  |   |  |  |   |   |

**GALA DINNER** 

