

İSTANBUL MEDİPOL ÜNİVERSİTESİ
MÜHENDİSLİK VE DOĞA BİLİMLERİ FAKÜLTESİ

HIBIT-2025

18TH THE INTERNATIONAL SYMPOSIUM ON HEALTH INFORMATICS AND BIOINFORMATICS

TARİH: 30 EKİM 2025 - 2 KASIM 2025

YER: GÜNEY KAMPÜS - KONFERANS SALONU

İLETİŞİM: ÖZGE ŞENSOY- osensoy@medipol.edu.tr



ABSTRACT
SUBMISSION



REGISTRATION



18TH THE INTERNATIONAL SYMPOSIUM ON HEALTH
INFORMATICS AND BIOINFORMATICS

30 OCTOBER WORKSHOP	
13.30 – 15.00	Özkan Özdemir Genomda Varyant Filtrelemenin Temelleri
15.00 – 15.15	Kahve Arası
15.15 – 17.00	Selcen Arı Yuka Transkriptom Analizi
31 OCTOBER, FRIDAY, HIBIT, DAY 1	
09.10 – 09.25	Opening Speech Yasemin Yüksel Durmaz, Vice Rector
09.25 – 09.35	SABITA: Emrah Eroğlu, Director of SABITA
09.35 – 09.40	HIBIT-2025 Welcome Speech, Özge Şensoy, Chair
09.40 – 10.30	Keynote Talk Oguz Akbilgic - An AI Model's Path from Algorithm to Patient Care
10.30 – 10.45	Coffee Break
SESSION 1	EMERGING COMPUTATIONAL METHODS
10.45 – 11.00	Selected Talk 1: Hilal Kazan Systematic Analysis of Batch Effect Metrics Reveals Shortcomings and Directions for Advancements
11.00 – 11.15	Selected Talk 2: Ali Baran Taşdemir FlowProt: Classifier-Guided Flow Matching for Targeted Protein Backbone Generation in the de novo DNA Methyltransferase Family
11.15 – 11.30	Selected Talk 3: Burak Suyunu Beyond Tokenization: Evolutionarily Grounded Units for Protein Language Understanding
11.30 – 11.45	Selected Talk 4: Ahmet Z. Nursoy Automated FRET Analysis for Enhanced Characterization of Protein Protein Interactions
12.00 – 13.30	Lunch Break
13.30 – 14.00	Invited Talk: Eralp Dogu Integrating Machine Learning and Longitudinal Monitoring for Quality Control in Mass Spectrometry-based Proteomics
SESSION 2	STRUCTURAL BIOINFORMATICS
14.00 – 14.15	Selected Talk 5: Bünyamin Şen BepiCon: A Geometric Deep Learning Framework for Conformational B Cell Epitope Prediction
14.15 – 14.30	Selected Talk 6: Şebnem Eşsiz Energy Landscape and Conformational Flexibility of Autoinhibited Human BRAF Domain - Domain Interactions

14.30 – 14.45	Selected Talk 7: Büşra Tayhan Regulatory Conformations of Calmodulin Modulated by Calcium Binding and Salt Concentration Variations
14.45 – 15.00	Selected Talk 8: Ecem Bulut Turhan Alternative Mechanisms for Selective Inhibition of the Undruggable KRAS G12D Mutant
15.00 – 15.15	Coffee Break
15.15 – 15.45	Invited Talk: Mine Köprülü Beyond the Genome: Unravelling Diverse Disease Mechanisms with Multi-Omics Data
SESSION 3	CLINICAL INFORMATICS
15.45 – 16.00	Selected Talk 9: Mehmet Koçak Utilization of National Health Surveys to Monitor Discrepancies in Preventive Health Screening by Gender, Age, and Region in Türkiye
16.00 – 16.15	Selected Talk 10: Rümeysa Ertürk Student-Generated Variant Lists Expose Hidden Reproducibility Gaps in Somatic Variant Calling
16.15 – 16.30	Selected Talk 11: Hacer Yeter Akıncı From Prediction to Prevention: Identifying Missed Opportunities in Chronic Disease Diagnosis
16.30 – 16.45	Selected Talk 12: Büşra Nur Darendeli Kiraz Benchmarking Automated ACMG/AMP Variant Classification Tools Against Gold-Standard and Disease-Specific Datasets
16.45 – 18.00	Poster Presentations
19.00 -	Gala Dinner
1 NOVEMBER, SATURDAY, HIBIT, DAY 2	
09.00 – 09.45	Coffee Break
09.40 – 10.30	Keynote Talk: Younes Mokrab
10.30 – 10.45	Coffee Break
10.45 – 11.15	Invited Talk: Ahmet Sureyya Rifaioğlu Machine Learning for Understanding Cancer Mechanisms Using Single-cell and Spatial Data
SESSION 4	AI IN HEALTH
11.15 – 11.30	Selected Talk 13: Veysel Kaya A Graph-Based Deep Learning Framework for Comparative Analysis of 3D Genome Topology
11.30 – 11.45	Selected Talk 14: Atabay Ünlü AI-Based Drug Repurposing for Rapid Broad-Spectrum Poxvirus Antiviral Discovery
11.45 – 12.00	Selected Talk 15: Cyrille Mesue Njume When Complexity Doesn't Pay: A Multi-Disease Benchmarking of Deep Learning and Ensemble Methods for Robust Biomarker Selection

12.00 – 13.30	Lunch Break
13.30 – 14.00	Invited Talk: H. Atakan Ekiz Reducing Barriers to High Throughput Data Analysis via Visual Interfaces
SESSION 5	BIOLOGICAL NETWORK ANALYSIS
14.00 – 14.15	Selected Talk 16: Aycan Şahin MetaboliticsDB: Unlocking Metabolic Insights through Integrated Network Analysis and AI-Driven Disease Association
14.15 – 14.30	Selected Talk 17: Aslı Dansık Extracellular Matrix-Guided Tumor Stratification and Network Models Reveal Clinical Molecular Grades
14.30 – 14.45	Selected Talk 18: İdil Duran Stratifying Glioblastoma Multiforme Tumors: Graph Representation Learning Combined with Network Propagation
14.45 – 15.00	Selected Talk 19: Zeynep Güner Yılmaz Using Mixed-Resolution Elastic Network Model for Binding Free Energy Calculations
15.00 – 16.15	Poster Presentations
16.15 – 17.00	Panel Discussion
17.00 – 17.15	Award Ceremony
17.15 – 17.30	Closing Remarks
2 NOVEMBER – RSG-TÜRKİYE SYMPOSIUM	
09.00 – 9.20	Kayıt
09.20 - 09:30	Açılış Konuşması
HESAPLAMALI BİYOLOJİ VE SAĞLIKTA VERİ ANALİZİ: OMİKS'TEN YAPAY ZEKAYA	
09.30 - 10.10	Konuşmacı: Özkan Özdemir Sağlıkta Yapay Zekâ ve FAIR Prensipleri
10.10 - 10.25	Talha Vatansev Decoding Tumor Identity: An Integrative Machine Learning Approach Reveals Immune Dichotomy in Thyroid Cancer
10.25 - 10.40	Mehmet Ali Erdoğan Benchmarking Metabolic Network-based Biomarker Discovery Methods
10.40 - 10.55	Gülüzar Nur Karahan Genomic Duplication Leaves Its Mark on Sequenced Transcriptome
10.55 - 11.10	Kahve Arası
11.10 - 11.50	Konuşmacı: Ogün Adebali Protein Ailelerinde İşlevsel Özelleşmenin Evrimsel Çözümlemesi
11.50 - 12.05	Gülnur Uzun Evaluating Single-Cell RNA-seq Integration Strategies to Decipher Psoriasis Heterogeneity

12.05 - 12.20	Seyit Semih Yiğitarslan Language Modeling-Based Generative Artificial Intelligence for De Novo Protein Design
12.20 - 13.30	Poster Sunumu & Öğle Yemeği Arası
KODDAN KAPSÜLE: HESAPLAMALI İLAÇ TASARIMI	
13.30 - 14.10	Konuşmacı: Vildan Enisoğlu Atalay İlaç Tasarımında Yeni Yaklaşım: Hesaplamalı Kimya
14.10 - 14.25	Kübranur Kazan Programmable Protein Communication: Optimal Control Sites and Time-Resolved Communication Maps
14.25 - 14.40	Kaan Kara Genome-Scale Metabolic Flux Analysis Meets Polygenic Risk Scores
14.40 - 14.55	Anthony Lor CovMutEx: SARS-CoV-2 Mutation Explorer and Prediction Tool
14.55 - 15.15	Kahve arası
15.15 - 15.55	Konuşmacı: Nurcan Tunçbağ Ağ Tıbbı Yaklaşımlarıyla Kompleks Hastalıkların Modellemesinde Gizli Biyomoleküler Bağlantıların Keşfi
ÖZEL SEKTÖRDE BİYOBİYOİNFORMATİK PANELİ	
16.00 - 17.00	Onur Emre Onat Moderatör
	Tolga Aslan Genomize - Panelist
	Seray Karaçay Massive - Panelist
	Saliha Durmuş PHITECH - Panelist
	Can Koşukcu PhD QIAGEN - Panelist
17.00 - 17.20	Ödül töreni & Kapanış



MEDİPOL
UNV-İSTANBUL
İSTANBUL MEDİPOL ÜNİVERSİTESİ