

Plan Table Feb 5, 2025

4th International Iranian Conference on Bioinformatics



Time	Speaker		Title			
07:45-08:15	Welcome	e reception				
08:15-09:00	Conferer	nce opening ceremony				
09:00-09:45		Dr. Fatemeh Zare	Computational Innovation in the Design of Biological Molecules			
09:45-10:05		Amir Mahdi Zhalefar	Enhancing Drug-Target Interaction Predictions through the Integration of Self-Organizing Maps and Graph-Based Representation Learning			
10:10-10:30		Hassan Alavi	In-silico Drug Generation using Masked Language Modeling			
10:30-11:00	Break and Poster Presentations					
11:00-11:45		Dr. Chuan Xu	CellTypist and CellHint: Towards Automated Annotation and Integration of Single-Cell Data			
11:45-12:05		Seyedeh Fatemeh Sajjadi	Comprehensive Integrated Single-Cell RNA Sequencing Analysis of Brain Metastasis and Glioma Microenvironment: Contrasting Heterogeneity Landscapes			
12:10-12:30		Amir Ebrahimi	A Contrastive Learning Framework for Single-Cell Multi-Omics Data Integration			
12:30-14:00	Lunch and Poster Presentations					
14:00-14:45		Dr. Mahya Mehrmohammadi	Classifying Somatic Mutation using Machine Learning-Based Approaches			
14:45-15:05		Hassan Salarabadi	HETLN: A Hybrid Ensemble Model for Precise Localization of Breast Cancer Tumors in Radiotherapy Treatment			
15:05-15:25		Donya Afshar Jahanshahi	Comprehensive Gene and Protein Catalog for Antimicrobial Environments: A Metagenomic Approach to Mitigate Antimicrobial Resistance			
15:25-15:45		Zahra Bayat	Uncovering Disrupted Cell-Cell Interactions in Alzheimer's Disease Using Variational Graph Autoencoders on Single-Cell Spatial Transcriptomics Data			
15:45-16:30		Break and Poster Pre	esentations			
16:30-17:15		Prof. Benjamin Raphael	Machine learning for Spatial Biology			
17:30-18:15		Dr. Mohammad Lotfollahi	Generative Machine Learning to Model Cellular Perturbations			



Plan Table Feb 6, 2025

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Time	Speaker		Title			
09:00-09:45		Dr. Leila Safari	Leveraging Language Models and Deep Transformer Networks in CRISPR-Based Genome Editing			
09:45-10:05		Roghayyeh Alipanahi	DTMP-Prime: A Deep Transformer-based Model for Predicting Prime Editing Efficiency and PegRNA Activity			
0:10-10:30		Marzieh Khodadadi	Predicting Anticancer Drug Repurposing Candidates using Knowledge Graphs			
0:30-11:00	Break and Poster Presentations					
1:00-11:45		Dr. Sajjad Gharaghani	From Traditional Drug Design to Deep Generative Models: Revolutionizing Drug Discovery			
11:45-12:05	5	Sajede Fadaei	A Knowledge Graph-Based Approach for Drug Repurposing Using Graph Neural Networks and Language Models			
2:10-12:30		Sobhan Ahmadian Moghadam	Integrating Biological Networks and Deep Learning for Microbe-Disease Prediction			
2:30-14:00		Lunch and Poster Pre	esentations			
4:00-14:45		Prof. Sofia Kossida	IMGT®, the International ImMunoGeneTics Information System® Current Endeavors and Future Perspecrives	÷		
4:45-15:05		Shahla Sahraei	Bioinformatic Approach to Predict the Regulatory Mechanisms: TF-miRNA-mRNA-IncRNA Network during Cluster Development in Grape	Ş		
15:05-15:25		Ali Yazdizadeh Kharrazi	Orthology inference at scale with FastOMA	Ş		
5:25-15:45	Break and Poster Presentations					
15:45-16:30		Dr. Alireza Khanteymoori	Democratising Bioinformatics: Accessible and Scalable Data Analysis with Galaxy	÷		

16:30-17:00

Conference closing ceremony