

# **Session topics**

$\triangleright$	Regulation of gene expression
	Biomarkers and therapeutics development
	Genetics
	Systems biology and bioinformatics
	Molecular evolution
	Biotechnology
$\triangleright$	Biomarkers and therapeutics development
	Molecular basis of disease
$\triangleright$	Design and structure of proteins
≻	Bioactive compounds and metabolism
$\succ$	Cellular processes and signaling

Advances in Molecular Biosciences: From Genes to Personalized Therapies



## **Preliminary Program**

### 1<sup>st</sup> DAY Wednesday, 24<sup>th</sup> September 2025

13:00 - 15:15	Registration			
15:30 - 16:00	Opening ceremony			
16:00 - 17:00	Plenary lecture: Jernej Ule, Slovenia - Protein-RNA feedback loops: roles in cellular homeostasis			
17:00 - 18:00	Regulation of gene expression	Biomarkers and therapeutics development		
17:00 - 17:30	Erna Karalija, BIH - Heritage of Hardship:	Olga Gornik, Croatia - N-glycosylation of		
	Transgenerational Stress Memory in	complement component 3 (C3) as a potential		
	Tomatoes	target in type 1 diabetes		
17:30 - 18:00	Rosa Karlić, Croatia - Decoding the interplay	Jelena Vekić, Serbia - Aspects of		
	between the epigenome and mutational	cardiometabolic risk in women: focus on		
	processes in cancer	pregnancy		
18:30 - 20:00	Welcome reception			

2 <sup>nd</sup> DAY Thursday, 25 <sup>th</sup> September 2025				
09:00 - 10:00	Plenary lecture: Ivan Mijaković, Sweden - Molecular biology meets nanotechnology: promise of personalized medicine			
10:00 - 11:00	Genetics	Systems biology and bioinformatics		
10:00 - 10:30	Lejla Kapur Pojskić, BIH - Novel research insights into biological effects of halogenated boroxine (HB) reconfirm its antitumor potential	Attila Csikász-Nagy, Hungary - From Yeast Cells to Digital Twins: Charting Cellular Networks for Disease and Drug Discovery		
10:30 - 11:00	<b>Uroš Potočnik, Slovenia</b> - Multi-omic biomarkers for personalized medicine and molecular mechanisms of non-response to biological drugs in chronic immune diseases	<b>Naris Pojskić, BIH</b> - Innovations in Bioinformatics Tools for the Analysis of Archeogenomics Data		
11:00 - 11:30	Coffee break			
11:30 – 13:30	Short Talk Session 1	Short Talk Session 2		
11:30 - 11:45	ТВА	ТВА		
11:45 - 12:00	ТВА	ТВА		
12:00 - 12:15	ТВА	ТВА		
12:15 - 12:30	ТВА	ТВА		
12:30 - 13:30	Plenary lecture: Balázs Papp, Hungary - Princ	siples of metabolome evolution		

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13:30 - 16:00	Lunch and Poster Presentations 1	
16:00 - 17:00	Molecular evolution	Biotechnology
16:00 - 16:30	<b>Damir Baranašić, Croatia</b> - Sequence determinants of transcription initiation and promoter architecture in vertebrates	Balázs Enyedi, Hungary - Illuminating Leukocyte Migration: Visualizing Chemoattractant Gradients with Novel Fluorescent Probes
16:30 - 17:00	<b>Bálint Csörgő, Hungary</b> - Molecular tools for probing bacteriophage-host interactions in clinical pathogens	Marko Živanović, Serbia - Electrospun Scaffolds: Merging Technology and Biomedicine for Scientific Progress
17:00 – 18:00	Short Talk Session 3	Short Talk Session 4
17:00 – 17:15	ТВА	ТВА
17:15 - 17:30	ТВА	ТВА
17:30 - 17:45	ТВА	ТВА
17:45 - 18:00	ТВА	ТВА
20:00 - 23:00	Congres	s dinner

3 <sup>rd</sup> DAY Friday, 26 <sup>th</sup> September 2025						
09:00 - 10:00	Plenary lecture: Ana Cvejić, Denmark - Single-cell multi-omics map of human foetal blood in Downs syndrom					
10:00 - 11:00	Molecular basis of disease	Design and structure of proteins				
10:00 - 10:30	<b>Naida Lojo-Kadrić, BIH</b> - Genetic Basis of Coronavirus Associated Dysosmia and Dysgeusia	Marjetka Podobnik, Slovenia - Structural characterization of factors involved in DNA- protein crosslink repair				
10:30 - 11:00	Iva Hafner Bratkovič, Slovenia - NLRP3 inflammasome and pyroptosis: from mechanisms to applications	Natalija Polović, Serbia - Amyloids - from pathological protein aggregates to promising nanomaterials				
11:00 - 11:30	Coffee break					
11:30 – 12:30	Short Talk Session 5	Short Talk Session 6				
11:30 – 11:45	TBA	ТВА				
11:45 - 12:00	ТВА	ТВА				
12:00 - 12:15	ТВА	ТВА				
12:15 - 12:30	ТВА	ТВА				
12:30 - 15:00	Coffee break, Lunch,	Poster presentations 2				



### 4<sup>th</sup> DAY Saturday, 27<sup>th</sup> September 2025

09:00 - 10:00	Plenary lecture: Lada Lukić Bilela, BIH - Lightless, not lifeless: Extreme habitats as sources of novel bioactive molecules		
10:00 - 11:00	Bioactive compounds and metabolism	Cellular processes and signaling	
10:00 - 10:30	<b>Bognár Zita, Hungary</b> - Comparison of Mitochondrial and Antineoplastic Effects of Amiodarone and Desethylamiodarone in Cancer Lines	<b>Mirta Boban, Croatia</b> - Degradation- mediated protein quality control in quiescent cells	
10:30 - 11:00	<b>Ivana Beara, Serbia</b> - Wine polyphenols: occurrence and biological activity as a biochemical aspect of wine quality	Tea Lanišnik Rižner, Slovenia - From biomarker discovery to molecular mechanisms: omics approaches in endometriosis	
11:00 - 11:30	Coffee break		
11:30 - 12:30	Short Talk Session 7	Short Talk Session 8	
11:30 - 11:45	ТВА	ТВА	
11:45 - 12:00	ТВА	ТВА	
12:00 - 12:15	ТВА	ТВА	
12:15 - 12:30	ТВА	ТВА	
12:30 - 13:30	Closing ceremony		

\*Additional SBS sessions will be added soon

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