



1st Meeting of Young Biophysicists

November 14, 2025
Ruđer Bošković Institute, Zagreb

PROGRAMME

08:30	Registration
09:00	Opening Nives Novosel Vlašić & Lana Vujica, Ruđer Bošković Institute, Zagreb
09:05	Welcome Remarks Nadica Ivošević DeNardis, Ruđer Bošković Institute, Zagreb
09:15	Greta Grassmann, University of Rome, Sapienza University Young section of the European Biophysical Societies' Association (yEBSA)
09:30	Invited lecture Aleksandra Maršavelski, University of Zagreb, Faculty of Science Integrative approaches in computational enzyme engineering: from sequence design to functional optimization
Membrane biophysics Chair: Ana Sunčana Smith, Ruđer Bošković Institute, Zagreb	
10:00	Ana-Marija Milisav, Ruđer Bošković Institute, Zagreb Antibiofilm Ag- and Cu-doped ZnO thin films with calcium phosphates
10:15	Maja Levak Zorinc, Ruđer Bošković Institute, Zagreb Marine-derived lipid vesicles: what secrets do they hold from sea to structure?

Cell biophysics Chair: Maja Novak, University of Zagreb, Faculty of Science	
10:30	Adrian Perhat, Ruđer Bošković Institute, Zagreb Temporal characterization of <i>in vitro</i> resistance to paclitaxel at the single-cell level
10:45	Mario Đura, Ruđer Bošković Institute, Zagreb Centrosome age asymmetry of chromosome unalignment in symmetrical cell divisions
11:00	Iva Dundović, Ruđer Bošković Institute, Zagreb Mapping the evolution of polyploidy in a model of intestinal regeneration
11:15	Coffee break
Computational Biophysics I Chair: Višnja Štepanić, Ruđer Bošković Institute, Zagreb	
11:45	Antonia Matić, Ruđer Bošković Institute, Zagreb The influence of a peptidase activity inhibitor on the stability of the DPP3-kelch complex
12:00	Lucija Tomašić, University of Zagreb, Faculty of Science Macro-karyotype approach reveals a universal selection principle across cancer types
12:15	Shane Fiorenza, University of Zagreb, Faculty of Science Synchronization of microtubule ends via length-dependent mechanisms regulates spindle dynamics
Computational Biophysics II Chair: Piotr Nowakowski, Ruđer Bošković Institute, Zagreb	
12:30	Boris Gomaz, University of Zagreb, Faculty of Science From motion to communication: tracking allosteric networks in purine nucleoside phosphorylase

12:45	Jelena Matekalo, University of Split, Faculty of Science Computational modeling of protein–metal nanoclusters for early diagnostic bioimaging
13:00	Matej Kožić, University of Zagreb, Faculty of Science Optimizing oligonucleotide selection for DNA data storage (ongoing research)
13:15	Lunch Break + Group Photo
Molecular Biophysics Chair: Aleksandra Maršavelski, University of Zagreb, Faculty of Science	
14:15	Katarina Kajan, Ruđer Bošković Institute, Zagreb Biophysical properties of transcription initiation during embryonic development
14:30	Marta Bošnjaković, Ruđer Bošković Institute, Zagreb High-resolution mapping of transcription start sites using CAGE-seq
14:45	Anamarija Budimir, University of Split, Faculty of Science Unstructured C-terminal in α -helical antimicrobial peptides modulates their activity
15:00	Suzana Inkret, Ruđer Bošković Institute, Zagreb Biomolecules and their role in improving properties of calcium phosphates/silver nanoparticles composite coatings on the titanium surface
15:30	Best Talk Awards & Meeting Closure Nives Novosel Vlašić & Lana Vujica, Ruđer Bošković Institute, Zagreb