

FEBS3+ MEETING

24th - 27th September

Hotel M / Belgrade



Serbia, Croatia, Hungary,
Slovenia, Bosnia and Herzegovina

” ADVANCES IN MOLECULAR BIOSCIENCES:
FROM GENES TO PERSONALIZED THERAPIES ”

SUPPORTED BY >



FEDERATION OF EUROPEAN
BIOCHEMICAL SOCIETIES

PROGRAM

ORGANIZED BY >



HDBMB
Hrvatsko društvo za biokemiju
i molekularnu biologiju



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Republic of Serbia
MINISTRY OF SCIENCE,
TECHNOLOGICAL DEVELOPMENT AND INNOVATION



DEAR COLLEAGUES AND FRIENDS,

We are delighted to greet you on occasion of the

FEBS3+ MEETING

” **ADVANCES IN MOLECULAR BIOSCIENCES:
FROM GENES TO PERSONALIZED THERAPIES** ”

that is being organized in Hotel M in **Belgrade, Serbia**, from **24th to 27th September 2025**.

On behalf of the Organizing Committee of **FEBS3+ Meeting**, the **Serbian Biochemical Society (SBS)**, and also on behalf of the **Croatian Society of Biochemistry and Molecular Biology (HDBMB)**, the **Hungarian Biochemical Society (HBS)**, the **Slovenian Biochemical Society (SBD)** and the **Association of Biochemists and Molecular Biologists in Bosnia and Herzegovina (ABMBBIH)**, we are pleased to see that you were able to join the upcoming scientific congress.

The congress is **regional gathering of scientists from five participating countries** that work in the fields of biochemistry and molecular biology. FEBS3+ Meeting is planned as a broad conference with a diversity of session topics to cover different aspects of life sciences studied in participating countries.

Scientific Committee defined an array of attractive session topics that help to gather almost 200 lecturers and participants on the event from all five of our cohost countries, but also from more than ten other countries throughout Europe.

We are certain that all colleagues present at the event will use the next three days to be introduced to innovative concepts, exchange experiences, refresh existing and establish new contacts with each other, in the pleasant atmosphere of Belgrade in September 2025.

We look forward to the event and a fruitful exchange among all of us.

Sincerely,

Prof. Natalija Polović

President of the Organizing Committee the FEBS3+ Meeting



MEMBERS OF THE SCIENTIFIC COMMITTEE:

- > **Adlija Čaušević**, University of Sarajevo, ABMBBIH
-
- > **Lejla Kapur Pojskić**, Institute for Genetic Engineering
and Biotechnology, Sarajevo, ABMBBIH
-
- > **Lada Lukić Bilela**, University of Sarajevo, ABMBBIH
-
- > **Nino Sinčić**, University of Zagreb, HDBMB
-
- > **Igor Stuparević**, University of Zagreb, HDBMB
-
- > **Marta Popović**, Institute Ruđer Bošković, Zagreb, HDBMB
-
- > **László Buday**, HUN-REN, Research Centre for Natural Sciences, Budapest, HBS
-
- > **Mihály Kovács**, Eötvös Loránd University, HBS
-
- > **László Virág**, University of Debrecen, HBS
-
- > **Roman Jerala**, National Institute of Chemistry, Ljubljana, SBD
-
- > **Boris Rogelj**, Jožef Stefan Institute, Ljubljana, SBD
-
- > **Nataša Poklar Ulrih**, University of Ljubljana, SBD
-
- > **Marija Gavrović-Jankulović**, University of Belgrade, SBS
-
- > **Tanja Ćirković Veličković**, University of Belgrade, SBS
-
- > **Đorđe Miljković**, Institute for Biological Research Siniša Stanković, Belgrade, SBS
-



MEMBERS OF THE ORGANIZING COMMITTEE

- > **Kasim Bajrović**, University of Sarajevo, ABMBBIH
- > **Emina Kiseljaković**, University of Sarajevo, ABMBBIH
- > **Damjan Franjević**, University of Zagreb, HDBMB
- > **Antonija Jurak Begonja**, University of Rijeka, HDBMB
- > **Beata Lontay**, University of Debrecen, HBS
- > **Zoltan Lipinszki**, Institute of Biochemistry, Biological Research Centre, Szeged, HBS
- > **Kristina Sepčič**, University of Ljubljana, SBD
- > **Ajda Taler Verčič**, University of Ljubljana, SBD
- > **Natalija Polović**, University of Belgrade, SBS
- > **Suzana Jovanović-Šanta**, University of Novi Sad, SBS



MEMBERS OF THE LOCAL ORGANIZING COMMITTEE

- > **Jelica Milošević**, University of Belgrade – Faculty of Chemistry, SBS secretary
- > **Nikolina Popović Kokar**, University of Belgrade – Faculty of Chemistry, SBS treasurer
- > **Dragana Robajac**, University of Belgrade – Institute for the Application of Nuclear Energy, SBS chair of publication committee
- > **Marija Stanišić**, University of Belgrade – Faculty of Chemistry, SBS member
- > **Milica Crnoglavac**, University of Belgrade – Faculty of Chemistry, SBS member
- > **Vladimir Mihailović**, University of Kragujevac, SBS vice-president



SESSION TOPICS

1.

MOLECULAR EVOLUTION

2.

SYSTEMS BIOLOGY AND BIOINFORMATICS

3.

REGULATION OF GENE EXPRESSION

4.

BIOMARKERS AND THERAPEUTICS DEVELOPMENT

5.

MOLECULAR BASIS OF DISEASE

6.

DESIGN AND STRUCTURE OF PROTEINS

7.

GENETICS

8.

BIOTECHNOLOGY

9.

BIOACTIVE COMPOUNDS AND METABOLISM

10.

CELLULAR PROCESSES AND SIGNALING



DAY 1

WEDNESDAY 24th September 2025

13:00 - 14:30



REGISTRATION

14:30 - 15:00

OPENING CEREMONY



15:00

FEBS

15:15

PRESENTATION



15:15

FEBS EDUCATION LECTURE

Chairpersons:

16:00

**Natalija Polović /Serbia,
Nino Sinčić /Croatia**

Ferhan Sargin /Turkey

Publish or perish? Zoom or doom?
Rethinking the future of research
and education

16:00

PLENARY LECTURE

Chairperson:

17:00

Beata Lontay /Hungary

Balázs Papp /Hungary

Leveraging genomic surveillance
to understand and combat antibiotic resistance

TOPIC 1

MOLECULAR EVOLUTION

Chairpersons:

**Marta Popović /Croatia,
Bálint Csörgő /Hungary**

TOPIC 2

**SYSTEMS BIOLOGY
AND BIOINFORMATICS**

Chairpersons:

**Attila Csikász-Nagy /Hungary,
Radivoje Prodanović /Serbia**

17:00

> Damir Baranašić /Croatia

17:30

Sequence determinants of
transcription initiation and promot-
er architecture in vertebrates

> Attila Csikász-Nagy /Hungary

From yeast cells to digital twins:
Charting cellular networks for
disease and drug discovery

17:30

> Bálint Csörgő /Hungary

18:00

Molecular tools for probing
bacteriophage-host interactions
in clinical pathogens

> Abdurahim Kalajdžić /BIH

Innovations in bioinformatics tools for
the analysis of archeogenomics data



18:00
-
18:30

INDUSTRY LECTURE ANALYSIS

Luka Mihajlović
Recent advances in HRAM-based -omics

19:00 - 20:30



WELCOME RECEPTION



DAY 2

THURSDAY 25th September 2025

09:00
-
10:00

PLENARY LECTURE *Chairperson:* **Boris Rogelj /Slovenia**

Jernej Ule /Slovenia
Collective homeostasis of condensation-prone proteins via their mRNAs

TOPIC 3

REGULATION OF GENE EXPRESSION *Chairpersons:* **Igor Stuparević /Croatia, Ágnes Tantos /Hungary**

10:00
-
10:30

> **Erna Karalija /BIH**
Priming the future: Harnessing plant memory for climate-resilient crops

10:30
-
11:00

> **Rosa Karlić /Croatia**
Decoding the interplay between the epigenome and mutational processes in cancer

TOPIC 4

BIOMARKERS AND THERAPEUTICS DEVELOPMENT *Chairpersons:* **Nino Sinčić /Croatia, Tamara Saksida /Serbia**

> **Olga Gornik /Croatia**
N-glycosylation of complement component 3 (C3) as a potential target in type 1 diabetes

> **Jelena Vekić /Serbia**
Aspects of cardiometabolic risk in women: focus on pregnancy

11:00 - 11:30



COFFEE **BREAK**



11:30
-
13:30

SHORT TALK SESSION 1

SHORT TALK SESSION 2

11:30
-
11:45

- > **Mehmet Gümüř /Turkey**
SACM1L modulates autophagic flux, cellular dynamics and PI3K-AKT-mTOR signalling in MCF7 breast cancer cells

- > **Isidora Protić-Rosić /Austria**
Redirected killing of allergen-specific CD4⁺ T cells by pMHC class II CAR NK-92 cells

11:45
-
12:00

- > **Agnes Tantos /Hungary**
Structural and functional effects of disease-related mutations of KMT2D

- > **Zorana Lopandić /Serbia**
Glycoengineered H1sD2 as a novel immunomodulatory agent for enhancing allergen-specific immunotherapy

12:00
-
12:15

- > **Dora Raos /Croatia**
Crosstalk between androgen receptor and hedgehog-GLI signaling pathways regulates psa expression in prostate cancer

- > **Loretta Laszlo /Hungary**
Stage-Dependent Remodeling of the RAS Network in Colon Adenocarcinoma

12:15
-
12:30

- > **Belmina Šerić Medić /BIH**
In silico functional assessment and molecular interaction modeling of antimicrobial agents

- > **Matilda Šprung /Croatia**
Quinuclidine-based quaternary ammonium compounds: a natural scaffold for antimicrobial innovation

12:30
-
13:30

PLENARY LECTURE

Chairperson:

Marija Gavrović Jankulović /Serbia

Ana Cvejić /Denmark

Single-cell multi-omics map of human foetal blood in Down syndrome

13:30 - 16:00

LUNCH AND POSTER PRESENTATIONS

13.30

> **LUNCH**



14:00
-
16:00

> **POSTER SESSION 1**

Biomarkers and therapeutics development /Molecular basis of disease

> **POSTER SESSION 2**

Biotechnology/Genetics



18:00
-
18:30

INDUSTRY LECTURE LKB

Aleksandra Kukhareva
Simplified tagged protein purification and removal

16:30
-
17:30

TOPIC 5

MOLECULAR BASIS OF DISEASE

Chairpersons:

Boris Rogelj /Slovenia,
Nino Sinčić /Croatia

TOPIC 6

DESIGN AND STRUCTURE OF PROTEINS

Chairpersons:

Marta Popović /Croatia,
Roman Jerala /Slovenia

16:30
-
17:00

- > **Naida Lojo-Kadrić /BIH**
Genetic basis of coronavirus associated dysosmia and dysgeusia

- > **Gregor Anderluh /Slovenia**
Engineering of protein nanopore for sensing applications

17:00
-
17:30

- > **Damjana Rozman /Slovenia**
Integrative omics for biomarker discovery in metabolic associated steatotic liver disease and hepatocellular carcinoma

- > **Natalija Polović /Serbia**
Amyloids - from pathological protein aggregates to promising nanomaterials

17:30
-
18:30

SHORT TALK SESSION 3

SHORT TALK SESSION 4

17:30
-
17:45

- > **Alma Herić /BIH**
Monitoring a patient with suspected myelodysplastic syndrome - case report

- > **Eszter Nagy-Kanta /Hungary**
Insights on the interaction between the postsynaptic GKAP and Shank scaffold proteins

17:45
-
18:00

- > **Antonija Jurak Begonja /Croatia**
Interleukin-1 alpha alters megakaryocyte maturation, promotes emperipoiesis, and induces a distinct proteomic profile

- > **Albert Pál /Hungary**
Engineering non-CG specific DNA methyltransferases for functional studies of epigenetic regulation

18:00
-
18:15

- > **Tamara Saksida /Serbia**
Connecting brain and gut inflammation in the murine model of Alzheimer's disease

- > **Natalija Andrejević /Serbia**
Unraveling the human serum albumin aggregation pathway: Structural insights into the amyloid/amorphous aggregation shift and oligomerization potential modulated by physiological ligands and thiol content



18:15 - 18:30 > **Özlem Darcansoy İşeri /Turkey**
Cellular and gene regulatory effects of genistein on docetaxel sensitive and resistant breast cancer cells.

> **Mujo Hasanović /BIH**
Seed Priming of *Solanum lycopersicum* with *Paraburkholderia phytofirmans* PsJN Enhances Nickel Stress Response and Induces Intergenerational Transcriptomic Modulation

20:00 - 23:00



CONGRESS DINNER



DAY 3

FRIDAY 26th September 2025

09:00 - 10:00

PLENARY LECTURE

Chairperson:

Antonija Jurak Begonja /Croatia

Ivan Mijaković /Sweden

Molecular biology meets nanotechnology: promise of personalized medicine

10:00 - 11:00

TOPIC 7

GENETICS

Chairpersons:

Emina Kiseljaković /BIH
Đorđe Miljković /Serbia

TOPIC 8

BIOTECHNOLOGY

Chairpersons:

Tanja Ćirković Veličković /Serbia
Zoltan Lipinszki /Hungary

10:00 - 10:30

> **Lejla Kapur Pojskić /BIH**
Novel research insights into biological effects of halogenated boroxine (HB) reconfirm its antitumor potential

> **Balázs Enyedi /Hungary**
Illuminating leukocyte migration: Visualizing chemoattractant gradients with novel fluorescent probes

10:30 - 11:00

> **Uroš Potočnik /Slovenia**
Multi-omic biomarkers for personalized medicine and molecular mechanisms of non-response to biological drugs in chronic immune diseases

> **Marko Živanović /Serbia**
Electrospun scaffolds: Merging technology and biomedicine for scientific progress



11:00 - 11:30



COFFEE **BREAK**

11:30
-
12:30

SHORT TALK SESSION 5

SHORT TALK SESSION 6

11:30
-
11:45

- > **Anita Skakić /Serbia**
CRISPR/Cas9 and iPSC-based platforms to explore pathophysiology and therapeutic approaches in glycogen storage disease type Ib

- > **Luka Blagojević /Serbia**
Characterisation and recombinant expression of a thermostable endoglucanase from *Bacillus velezensis* for lignocellulosic biomass hydrolysis

11:45
-
12:00

- > **Cecile Otten /Croatia**
ACRC/GCNA is an essential protease which repairs DNA-protein crosslinks during embryonic development

- > **Tina Vida Plavec /Slovenia**
Engineering *Lactococcus cremoris* for recombinant protein packaging into extracellular vesicles

12:00
-
12:15

- > **Anja Pišlar /Slovenia**
Multifunctional roles of γ -enolase in the central nervous system: More than a neuronal marker

- > **Nina Tiršo /BIH**
Melatonin modulates lipid metabolism in a rat model of testosterone-induced polycystic ovary syndrome: Comparison with metformin and combination therapy

12:15
-
12:30

- > **Arshi Arshi /Hungary**
Effects of 2-deoxyglucose and diclofenac sodium on MCF7 cell lines

- > **Mario Stojanović /Croatia**
Toll-like receptors as a missing link in Notch signaling cascade during neurodevelopment

12:30
-
13:30

PLENARY LECTURE

Chairperson:

Lejla Kapur Pojskić /BIH

Lada Lukić Bilela /BIH

Lightless, not lifeless: Extreme habitats as sources of novel bioactive molecules



13:30 - 16:00

LUNCH AND POSTER PRESENTATIONS

13.30

> **LUNCH**



14:00
-
16:00

> **POSTER SESSION 3**

Design and structure of proteins/Regulation of gene expression/Systems biology and bioinformatics

> **POSTER SESSION 4**

Bioactive compounds and metabolism/Cellular processes and signalling

16:00
-
17:00

TOPIC 9

BIOACTIVE COMPOUNDS AND METABOLISM

Chairpersons:

Nataša Poklar Ulrih /Slovenia
Suzana Jovanović Šanta /Serbia

TOPIC 10

CELLULAR PROCESSES AND SIGNALING

Chairpersons:

Igor Stuparević /Croatia
Antonija Jurak Begonja /Croatia

16:00
-
16:30

> **Zita Bognár /Hungary**

Comparison of mitochondrial and antineoplastic effects of amiodarone and desethylamiodarone in cancer lines

> **Mirta Boban /Croatia**

Degradation-mediated protein quality control in quiescent cells

16:30
-
17:00

> **Ivana Beara /Serbia**

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

11:30
-
12:30

SHORT TALK SESSION 7

SHORT TALK SESSION 8

17:00
-
17:15

> **Cene Skubic /Slovenia**

Sterol specific regulation of hepatic signaling distinct roles of lanosterol, desmosterol and lathosterol in liver cell fate and signaling

> **Snježana Jurić /Slovenia**

Nanobodies Uncouple Florigen Binding to Membranes and THF1



17:00
-
17:15

> **Dragica Mićanović /Serbia**
The mechanism of action of HYCO-3, an Nrf2 activator/CO releaser hybrid, in inhibiting autoimmune disease development in mouse models

> **Milena Zlatanova /Serbia**
Proteolytically active allergen Act d 1 induces inflammation via TLR4 receptor cleavage

17:15
-
17:30

> **Berfin Doğa Koçkaya /Turkey**
Investigation of the effects of selected miRNAs using bioinformatics approaches on AHNAK protein regulation in drug-resistant breast cancer cells

> **Lana Vujica /Croatia**
Understanding the ecotoxicological role of the Oatp1d1 transmembrane transporter using a zebrafish (Danio rerio) Oatp1d1 mutant line

18:00 - 20:00

SLOVENIAN BIOCHEMICAL SOCIETY SESSION

Chairpersons:

Gregor Anderluh /Slovenia,
Marija Gavrović – Jankulović /Serbia

18:00-18:30 > **Igor Križaj /Slovenia**
From snake venom to therapy: A novel drug candidate for short-term thrombosis prevention

18:30-19:00 > **Iva Hafner Bratkovič /Slovenia**
NLRP3 inflammasome and pyroptosis: from mechanisms to applications

19:00-19:30 > **Tina Lebar /Slovenia**
Homology-guided engineering of tyrosine recombinase DNA specificities

19:30-19:45 > **Boštjan Petrič /Slovenia**
Alzheimer's dementia and paraoxonase 1: Why it pays off to measure enzyme kinetics and not just activities

20:00 - 21:00

CLOSING CEREMONY



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EXHIBITOR & INDUSTRY LECTURE



EXHIBITOR & INDUSTRY LECTURE



PCO PARTNER



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