



2<sup>nd</sup> Congress of Molecular Biologists of Serbia

# Second Congress of Molecular Biologists of Serbia

Belgrade  
October 1-3, 2020

## Important dates

Call for abstracts - **February 1, 2020**

Abstract submission - **June 1, 2020**

Abstract acceptance - **July 1, 2020**

Early Bird Registration - **July 15, 2020**

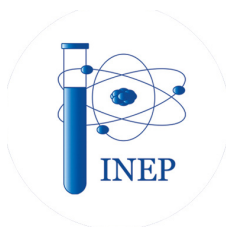
## MAIN CONGRESS ORGANIZER

Serbian Society for  
Molecular Biology (MolBioS)



## CONGRES ORGANIZERS

Serbian Society for Molecular Biology (MolBioS)  
University of Belgrade, Faculty of Biology  
University of Belgrade, Institute for Biological Research "Siniša Stanković",  
National Institute of Republic of Serbia  
University of Belgrade, Institute of Molecular Genetics and Genetic Engineering  
University of Belgrade, Institute of Nuclear Sciences Vinča  
University of Belgrade, INEP Institute for Application of Nuclear Energy  
University of Novi Sad, Faculty of Sciences  
University of Kragujevac, Faculty of Science, Department of Biology and Ecology  
University of Niš, Faculty of Science and Mathematics



## GOLD SPONSORS



## SILVER SPONSORS







## CONGRESS VENUE

BELGRADE YOUTH CENTER,  
MAKEDONSKA 22,  
11000 BELGRADE, SERBIA



Photos from the First Congress of Molecular Biologist of Serbia held in 2017

## OFFICIAL LANGUAGE OF THE CONGRESS

English



## WELCOME ADDRESS



**Prof. Gordana Matić**  
President of the Serbian Society  
for Molecular Biology



**Prof. Goran Brajušković**  
Chair of the CoMBoS  
Organizing Committee

Dear colleagues and friends,

On behalf of The Serbian Society for Molecular Biology (MolBioS), with great pleasure, we invite you to Belgrade for the Second International Congress of Molecular Biologists of Serbia (CoMBoS 2). CoMBoS 2 will be held from October 1-3, 2020 at the Belgrade Youth Center, a cult meeting point for generations of art and culture lovers, located in the heart of the city. The programme will cover many fields of modern molecular biology, including molecular biomedicine, molecular biotechnology and molecular cell biology. It will consist of plenary lectures,

symposia and poster sessions, with special attention paid to young scientists through the Young Scientist Forum and flesh presentations. We aim to foster curiosity, communication and collaboration, as well as to provide an opportunity for molecular biologists and related scientists to share ideas and experiences and be inspired by the outstanding lectures of renowned scientists and experts.

**WE LOOK FORWARD TO WELCOMING YOU  
IN BELGRADE AT CoMBoS 2**





## CONGRESS COMMITTEES

### HONORARY COMMITTEE

**Vladimir Kostić**

*President of the Serbian Academy of Sciences and Arts*

**Ivanka Popović**

*Rector, University of Belgrade*

**Željko Tomanović**

*Dean, University of Belgrade  
– Faculty of Biology*

**Milica Pavkov Hrvojević**

*Dean, University of Novi Sad  
– Faculty of Sciences*

**Perica Vasiljević**

*Dean, University of Niš  
– Faculty of Sciences and Mathematics*

**Srećko Trifunović**

*Dean, University of Kragujevac  
– Faculty of Science*

**Mirjana Mihailović**

*Director, University of Belgrade – Institute for Biological Research “Siniša Stanković”*

**Jelena Begović**

*Director, University of Belgrade – Institute for Molecular Genetics and Genetic Engineering*

**Snežana Pajović**

*Acting Director, University of Belgrade  
– Institute for Nuclear Sciences “Vinča”*

**Olgica Nedić**

*Director, University of Belgrade  
– INEP Institute for Application of Nuclear Energy*

**Goran Anačkov**

*Head of the Department of Biology and Ecology, Faculty of Sciences, University of Novi Sad*

**Milan Stanković**

*Head of the Department of Biology and Ecology, Faculty of Science, University of Kragujevac*

**Ana Savić**

*retired Professor*

**Dragutin Savić**

*retired Professor*

**Ljubiša Topisirović**

*retired Professor*

### SCIENTIFIC COMMITTEE

Chair: **Gordana Matić** (Serbia)

Members:

Urs Emanuel Albrecht (Switzerland)

Paul Cotter (Ireland)

Guiliana Decorti (Italy)

Đorđe Fira (Serbia)

Tomasz Jurkowski (Germany)

Goran Korićanac (Serbia)

Tatjana Kostić (Serbia)

Sonja Pavlović (Serbia)

Dušanka Savić-Pavićević (Serbia)

Igor Štagljar (Canada)

Vittorio Venturi (Italy)

Melita Vidaković (Serbia)

Oliver Vugrek (Croatia)



## ORGANIZING COMMITTEE

Chair: **Goran Brajušković**

Members:

Silvana Andrić	Jelena Lozo
Svetlana Dinić	Marija Mojsin
Ana Đorđević	Maja Stojiljković
Branko Jovčić	Maja Živković

## TECHNICAL COMMITTEE

Chair: **Danijela Vojnović Milutinović**

Members:

Miloš Brkušanin	Suzana Matijašević
Miloš Đorđević	Bojana Mičić
Ljupka Gligorovska	Jovan Pešović
Jelena Karanović	Ana Teofilović
Nevena Kotarac	Bojan Ristivojević
Sanja Kovačević	Nevena Todorović
Stefan Lazić	Anja Tolić
Milka Malešević	Ivan Životić

## PLENARY SPEAKERS (in alphabetical order by last name)

**Urs Albrecht**

*University of Fribourg, Fribourg, Switzerland*

**Filip Bošković**

*University of Cambridge, Biological and Soft Systems, Cavendish Laboratory, Cambridge, UK*

**Paul Cotter**

*Teagasc Food Research Centre, Teagasc, Moorepark, Fermoy, Ireland*

**Giuliana Decorti**

*Institute for Maternal and Child Health, IRCCS Burlo Garofolo, Trieste, Italy*

**Mariagrazia Di Luca**

*Pisa University, Department of Biology, Pisa, Italy*

**Radoje Drmanac**

*Complete Genomics, Inc., Mountain View, California, USA*

**Miloš Filipović**

*University of Bordeaux, Bordeaux, France*





## PLENARY SPEAKERS (in alphabetical order by last name)

**Tomasz Jurkowski**

*Cardiff University, School of Biosciences, Cardiff, Wales, UK*

**Vladimir Kostić**

*Serbain Academy of Science and Arts, Belgrade, Serbia  
University of Belgrade, School of Medicine, Institute of Neurology,  
Clinical Center of Serbia, Belgrade, Serbia*

**Nataša Skoko**

*Head of Biotech Development Unit, ICGEB, Trieste, Italy*

**Milena Stevanović**

*Serbain Academy of Science and Arts, Belgrade, Serbia  
University of Belgrade, Institute of Molecular Genetics  
and Genetic Engineering*

**Igor Štagljar**

*University of Toronto, Faculty of Medicine, Donnelly Centre,  
Department of Molecular Genetics, Department of Biochemistry, Toronto, Canada*

**Vittorio Venturi**

*International Centre for Genetic Engineering and Biotechnology, Trieste, Italy*

## INVITED SPEAKERS (in alphabetical order by last name)

**Miroslav Adžić**

*University of Belgrade, Vinča Institute of Nuclear Sciences*

**Pavel Bashtrykov**

*University of Stuttgart, Institute of Biochemistry and  
Technical Biochemistry, Stuttgart, Germany*

**Miroslav Dinić**

*University of Belgrade, Institute of Molecular Genetics  
and Genetic Engineering*

**Danijela Drakulić**

*University of Belgrade, Institute of Molecular Genetics  
and Genetic Engineering*

**Nevena Grdović**

*University of Belgrade, Institute for Biological Research "Siniša Stanković"*

**Sanja Jeremić**

*University of Belgrade, Institute of Molecular Genetics  
and Genetic Engineering*



## INVITED SPEAKERS (in alphabetical order by last name)

**Milan Kojić**

*University of Belgrade, Institute of Molecular Genetics  
and Genetic Engineering*

**Jelena Krstić**

*Medical University of Graz, Gottfried Schatz Research Center, Graz, Austria*

**Nataša Lončarević Vasiljković**

*University of Belgrade, Institute for Biological Research "Siniša Stanković"*

**Jelena Lozo**

*University of Belgrade, Faculty of Biology*

**Dragomir Milovanović**

*Charité University Clinic, German Center for Neurodegenerative  
Diseases, Berlin, Germany*

**Đorđe Miljković**

*University of Belgrade, Institute for Biological Research "Siniša Stanković"*

**Jovan Mirčetić**

*Dresden University of Technology, Dresden, Germany*

**Jasmina Nikodinović Runić**

*University of Belgrade, Institute of Molecular Genetics  
and Genetic Engineering*

**Ivan Nikolić**

*University of Belgrade, Faculty of Biology*

**Tijana Stanković**

*University of Belgrade, Institute for Biological Research "Siniša Stanković"*

**Maja Stojiljković**

*University of Belgrade, Institute of Molecular Genetics  
and Genetic Engineering*

**Oliver Vugrek**

*Institute "Ruđer Bošković", Zagreb, Croatia*





## REGISTRATION

**Online registration is now open. Please register via:**

<https://molbios.bio.bg.ac.rs/combos2/registration/registration-form>

## REGISTRATION FEES

### Early registration by July 15, 2020

**12000 RSD or 100 EUR**

- \*PhD students 6000 RSD or 50 EUR
- \*\*MolBioS members 9000 RSD or 75 EUR
- \*PhD students (MolBioS members) 4500 RSD or 40 EUR

### Late registration after July 15, 2020

**18000 RSD or 150 EUR**

- \*PhD students 9000 RSD or 75 EUR
- \*\*MolBioS members 14000 RSD or 120 EUR
- \*PhD Students (MolBioS members) 7000 RSD or 60 EUR

\* A student's status must be confirmed by the Head of Department or the Head of PhD programme. The confirmation should be in the form of signed letter with the official institutional stamp.

\*\* Please note that the membership fee can only be granted if you are a MolBioS member at the time of registration.

There is no registration fee for undergraduate students. If you are an undergraduate student and interested in CoMBoS, please contact the Congress Office at [molbios@bio.bg.ac.rs](mailto:molbios@bio.bg.ac.rs) before June 1, 2020.

**For detailed payment and bank transfer instructions please click here:**  
[Information about payment](#)

## ABSTRACTS

**Abstract submission will be open from February 1, 2020 via e-mail:**  
[molbios@bio.bg.ac.rs](mailto:molbios@bio.bg.ac.rs)

Abstract submission deadline:

**June 1, 2020**

Abstract acceptance announcement:

**July 1, 2020**

**The guidelines for abstract submission are available on:**

<https://molbios.bio.bg.ac.rs/combos2/abstracts/abstract-guidelines>

Abstracts will be published in English in the electronic Book of Abstracts

## ATTENDANCE CERTIFICATE

**Participants will receive their Attendance Certificates at the Registration Desk on the last day of their attendance**

## REGISTRATION DESK

**Registration desk working hours:**

October 1, 2020: 12.00 – 18.00

October 2, 2020: 09.00 – 19.00

October 3, 2020: 09.00 – 17.00

**All congress material will be available at the Registration Desk located in the central hall of the Belgrade Youth Center**



October 1, 2020

## Young Scientist Forum (YSF)

*Institute for Biological Research „Siniša Stanković”,  
Despot Stefan Blvd. 142, Belgrade*

Chairs: **Svetlana Dinić, Jovan Mirčetić, Marko Panić**

<b>08.00 - 08.30</b>	<b>Registration</b>
08.30 - 08.45	Opening Remarks
08.45 - 09.15	Sulfaging: how to live longer with H <sub>2</sub> S <b>Miloš Filipović</b> (France)
09.15 - 09.45	Who is Who Presentations
<b>09.45 - 10.00</b>	<b>Coffee Break</b>
10.00 - 10.30	Targeted DNA methylation as an epigenetic tool for cellular reprogramming <b>Tomasz Jurkowski</b> (Germany)
10.30 - 11.00	Poster Presentations
11.00 - 11.30	Monitoring G-quadruplex formation on the single-molecule level <b>Filip Bošković</b> (UK)
11.30 - 13.00	Oral Presentations





# Main program

*Belgrade Youth Center,  
Makedonska 22, Belgrade*

**12.00 - 13.45**      **Registration**

## OPENING CEREMONY

Chairs: **Gordana Matić, Goran Brajušković**

14.00 - 14.20      Welcome Speeches

14.20 - 14.40      Homage to Professor Vladimir Glišin  
**Jelena Begović** (Serbia)

14.40 - 15.00      Music Program

## Session OPENING PLENARY LECTURES

Chairs: **Đorđe Fira, Gordana Matić, Dušanka Savić Pavićević**

15.00 - 15.45      Converting fundamental microbiome research to real world applications  
**Paul Cotter** (Ireland)

15.45 - 16.15      Potential new class of non-coding RNA acts via intermolecular G-quadruplex formation  
**Filip Bošković** (UK)

## Session MolBioS AWARD LECTURE

Chairs: **Gordana Matić, Goran Brajušković**

16.15 - 16.30      MolBioS Award Ceremony

16.30 - 17.00      SOX genes: from discovery towards revealing their functions  
**Milena Stevanović** (Serbia)

## WELCOME COCKTAIL (17.00 – 18.00)

17.00 - 17.10      Group Photo Session



October 2, 2020

## Session 1: MOLECULAR BIOMEDICINE

Chairs: **Milena Stevanović, Goran Brajušković, Sonja Pavlović**

- 09.00 - 09.30 GBA-associated parkinsonism  
**Vladimir Kostić** (Serbia)
- 09.30 - 10.00 Precision therapies against the EGFR-driven lung cancer adenocarcinoma  
**Igor Štagljar** (Canada)
- 10.00 - 10.30 Pharmacogenomic and pharmacokinetic approaches for precision therapy in pediatric patients  
**Giuliana Decorti** (Italy)
- 10.30 - 10.40 Discussion
- 10.40 - 11.00 Coffee Break**
- 11.00 - 11.20 Missense mutations alter mRNA stability in patients suffering from AHCY deficiency - New insights into an enigmatic cellular mechanism  
**Oliver Vugrek** (Croatia)
- 11.20 - 11.40 Functional genetic screens in 3D organoid models of gastrointestinal cancers  
**Jovan Mirčetić** (Germany)
- 11.40 - 12.00 Epigenome editing: a new avenue for the development of targeted therapies  
**Pavel Bashtrykov** (Germany)
- 12.00 - 12.10 Discussion
- 12.10 - 12.20 Rare metabolic diseases in the genomics era  
**Maja Stojiljković** (Serbia)
- 12.20 - 12.30 22q11.2 Deletion syndrome: our experience with detection of microdeletion and genotype-phenotype correlation  
**Danijela Drakulić** (Serbia)



12.30 - 12.40 3D biomimetic models in preclinical anticancer research  
**Tijana Stanković** (Serbia)

12.40 - 12.55 Flesh Presentations (3 x 5 min)

12.55 - 13.00 Discussion

**13.00 - 14.30** **Poster Session 1 and 2**

**13.00 - 14.30** **Lunch**

## **Session 2: MOLECULAR BIOTECHNOLOGY**

Chairs: **Dorđe Fira, Jelena Lozo, Branko Jovčić**

14.30 - 15.00 Bacteriophage-based technology: back to the past to move forward into the future  
**Mariagrazia Di Luca** (Italy)

15.00 - 15.30 Bacterial interspecies signalling in the plant microbiome  
**Vittorio Venturi** (Italy)

15.30 - 16.00 Development of biosimilars and transfer of know-how to industry: opportunities and challenges  
**Nataša Skoko** (Italy)

16.00 - 16.10 Discussion

**16.10 - 16.30** **Coffee Break**

16.30 - 16.50 Antimicrobial peptides as promising alternative for treatment of pathogens  
**Milan Kojić** (Serbia)

16.50 - 17.10 Bacteria - plant interplay during water deficiency: genotype matters  
**Jelena Lozo** (Serbia)

17.10 - 17.30 Microbes and microbial enzymes for degradation of (bio)plastics  
**Jasmina Nikodinović Runić** (Serbia)

17.30 - 17.40 Discussion

17.40 - 17.50 Bacterial nanocellulose - advanced material with versatile applications  
**Sanja Jeremić** (Serbia)

17.50 - 18.00 Keeping up with the *Caenorhabditis elegans*: a model system to study host-microbe interactions  
**Miroslav Dinić** (Serbia)



- 18.10 - 18.20 Screening and visualization of T3SS extracellular proteins  
- virulence factors of *Pseudomonas syringae* pv. *aptata*  
**Ivan Nikolić** (Serbia)
- 18.20 - 18.35 Flesh Presentations (3 x 5 min)
- 18.35 - 18.40 Discussion

**October 3, 2020**

## **Session 3: MOLECULAR MECHANISMS OF CELL FUNCTIONS**

Chairs: **Melita Vidaković, Tatjana Kostić, Ana Đorđević**

- 09.00 - 09.30 Pronounced sequence preference of mammalian TET enzymes directs  
DNA demethylation  
**Thomasz Jurkowski** (UK)
- 09.30 - 10.00 The circadian system - Coordinating physiology and behavior  
**Urs Albrecht** (Switzerland)
- 10.00 - 10.30 Molecular mechanism(s) of hydrogen sulfide signaling  
**Miloš Filipović** (France)
- 10.30 - 10.40 Discussion
- 10.40 - 11.00 Coffee Break**
- 11.00 - 11.20 Effects of ethyl pyruvate on molecular mechanisms of immune  
cell functions  
**Đorđe Miljković** (Serbia)
- 11.20 - 11.40 Reversibility as a keyword: Searching for novel therapeutic approaches  
for treating EMT-related ocular conditions  
**Nevena Grdović** (Serbia)
- 11.40 - 12.00 Organization and dynamics of the nerve terminal  
**Dragomir Milovanović** (Germany)
- 12.00 - 12.10 Discussion
- 12.10 - 12.20 Molecular mechanisms underlying positive effects of fish oil  
supplementation in presymptomatic phase of AD: study of 5xFAD model  
**Nataša Lončarević Vasiljković** (Serbia)
- 12.20 - 12.30 Preclinical and clinical studies of psychiatric disorders  
**Miroslav Adžić** (Serbia)



12.30 - 12.40	Overcoming therapy resistance in hepatocellular carcinoma by fasting <b>Jelena Krstić</b> (Serbia)
12.40 - 12.55	Flesh Presentations (3 x 5 min)
12.55 - 13.00	Discussion
<b>13.00 - 14.00</b>	<b>Sponsor's Hour</b>
<b>14.00 - 15.00</b>	<b>Poster Session 3</b>
<b>14.00 - 15.00</b>	<b>Lunch</b>

## Session CLOSING PLENARY LECTURE

Chairs: **Milena Stevanović, Đorđe Fira**

15.00 - 15.45	Towards "unlimited" DNA sequencing for advanced molecular biology and medicine <b>Radoje Drmanac</b> (USA)
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## CLOSING CEREMONY

Chairs: **Goran Brajušković, Gordana Matić**

15.45 - 16.00	Best Poster Award Ceremony
16.00 - 16.15	Closing Remarks
16.15 - 16.35	Music Program

## Serbian Society for Molecular Biology (MolBioS) Assembly

**16.35 – 17.00**







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