

CONGRESS PROGRAMME

FEBS3+ MEETING

*„50 years of Recombinant
DNA – Past, Present, Future“*

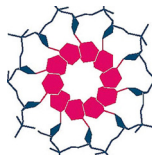
XXVIITH BIOCHEMISTRY CONGRESS

OF SLOVAK AND CZECH SOCIETIES
FOR BIOCHEMISTRY AND
MOLECULAR BIOLOGY WITH
COOPERATION OF HUNGARIAN
AND UKRAINIAN BIOCHEMICAL
SOCIETIES



SLOVAKIA
FEBS3+
meeting

ORGANIZERS



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WELCOME

Dear participants,

It is with real pleasure that we proudly host the XXII th Biochemistry Congress - FEBS3+ meeting, which will take place on September 10th-13th, 2023 in the amazing environment of the High Tatras in Slovakia. The congress bears the motto: „50 years of recombinant DNA - Past, Present, Future“ to commemorate the anniversary of the creation of the First Recombinant DNA. This newly born technology has become one of the basic approaches in various research areas such as healthcare, agriculture, industry, energy. The advent of recombinant DNA technology revolutionized the development and research of life sciences and led to a series of dramatic changes. A lot has happened since its discovery and it offered us new opportunities for innovation and was able to prepare many new molecules with the therapeutic effect of DNA.

The congress as a FEBS3+ meeting is organized by the Slovak Society for Biochemistry and Molecular Biology in close cooperation with the Czech Society for Biochemistry and Molecular Biology and with the organizational participation of the Ukrainian Biochemical Society and the Hungarian Biochemical Society. Excellent scientists from Europe are invited, the scientific sections of the congress will be held in English and their thematic structure reflects the latest trends in Biochemistry and Molecular Biology research.

Congress participants will be welcomed at the Grand Hotel Bellevue in the heart of the High Tatras in Horný Smokovec. Nature of High Tatras offers unusually clean air, mountain climate, wonderful fauna and flora. You will find glacial ponds, many beautiful hiking trails, many beautiful waterfalls, or the Belianska cave, the only accessible cave in the High Tatras. Thanks to this, the High Tatras

received the prestigious award as the most important European destination of 2019, which they received from Lonely Planet.

We worked hard to make the event in the High Tatras an attractive congress for all participants. The program covers a wide range of current topics in the field of molecular life science, especially biochemistry, molecular biology and related sciences. To continue tradition of the biochemistry congress, the meeting will feature basic scientific sessions in the field of life sciences research including lectures of invited keynote speakers and oral communications selected from the submitted abstracts. In addition to an attractive scientific program we also promise to prepare an enjoyable social events.

We believe that this event will be a place for lively scientific debates, confirmation of existing research collaborations and establishment of new scientific contacts in the pleasant environment of beautiful Slovak nature. The goal is also to offer young scientists important information about FEBS, IUBMB, EMBL and can help them develop their future scientific careers.

We hope that your professional expectations will be fulfilled and you will attend many interesting lectures and meetings which will bring inspirations for your future research.

Ján Turňa
President of SSBMB

Gabriela Gavurníková
Stanislav Stuchlík
Zdenko Levarski
Local Organizing Committee

VENUE

The Grand GRAND HOTEL BELLEVUE Resort is located in the oldest settlement of the High Tatra Mountains – Starý Smokovec – at the altitude of 1,010 metres above the sea level. The site is known as Pekná Vyhliadka (“Beautiful View”), situated at the foothill of Slavkovský štít (Slavkovský Peak). The name of the hotel – BELLEVUE – is derived from the French translation of the site.

Present Grand Hotel Bellevue arose from two Tatra hotels – hotel Bellevue and Hotel Sport.

Grand Hotel Bellevue has been designed and built with the intention to offer exceptional opportunities. Due to the strategic location hotel can be easily accessed by car, train or plane. From the European point of view the High Tatra Mountains are a unique combination of natural beauties, alpine environment with excellent conditions for tourism and skiing, as well as climatic spa combining healing effects of altitude with sunshine and fresh air.

XXVIIth Biochemistry congress



Featuring 150 guest rooms, congress hall for 750 participants, function rooms with flexible layout, wellness centre and sports facilities, Grand Hotel Bellevue is an excellent venue for your business, leisure and sports. Complete space for 1200 participants.

The Multipurpose congress hall GRAND BELLEVUE, together with 5 smaller function rooms with flexible layout is an excellent place for organizing cultural, social or corporate events or family reunions. Total floor space of 1,000 square metres is suitable for international events, exhibitions and business presentations.

The congress hall can be divided into two separate conference rooms – BELLEVUE I. with the area of 395 square metres and seating capacity of 340 people and BELLEVUE II. with the area of 256 square metres and seats for 220 people.

It is our goal to bring you first class services that combine tradition with modern style:

- professional approach
- Slovak hospitality
- friendly staff



COMMITTEES

CONGRESS CHAIR

Ján Turňa

CONGRESS CO – CHAIR

Libor Grubhoffer

CONGRESS ORGANIZING COMMITTEE

Gabriela Gavurníková

Stanislav Stuchlík

Zdenko Levarski

Alena Hajduchová

Anton Horváth

Miroslav Barančík

Irena Krumlová

SCIENTIFIC PROGRAMME COMMITTEE

Ján Turňa (Charmain)

Stanislav Stuchlík

Albert Breier

Erik Sedlák

Peter Račay

Zdenko Levarski

Gabriela Gavurníková

Anton Horváth

SOCIAL EVENTS

Welcomme reception in the Congres Venue

Sunday, 9th September 2023

Start: 19:00 (till 21:00)

Location: Congress Grand Hotell Bellevue

About the Event:

After the Opening ceremony we invite
all participants of the Congress

Menu : snacks and drinks

Price: included in the registration fee

Gala Dinner

Monday 11Th September 2023

Start: 19:30 (till 22:00)

Location: Congress Grand Hotel Bellevue

Menu: Hot dishes, snacks, desserts, hot
and cold beverages, wine, beer

Price 35 Eur

For the congress participants who
chose the Gala Dinner in the extra options

Social event - Wine tasting

Tuesday 12th September 2023

Start: 19:30 (till 22:00)

Location: Congress Grand Hotel Bellevue

Menu: Hot dishes, snacks, desserts, hot
and cold beverages, wine, beer

Price 45 Eur

For the congress participants who chose
the Social event



POSTERS SESSION

10th - 13th September 2023

Start : 18:00 - 19:00

Location : Foyer Grand hotel Bellevue

Posters discussion (The organizing committee will award three best posters at the FEBS3+ congress closing ceremony)

Poster size should not exceed 841 mm x 1189 mm (A0).

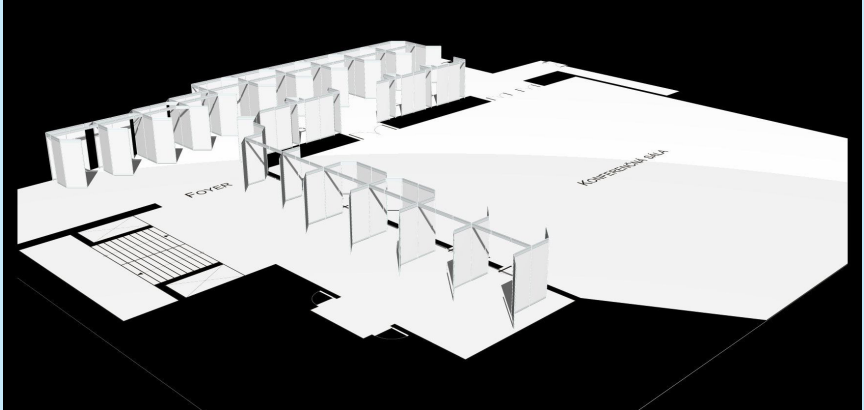
Posters should be mounted at the panels before 10:00AM

The poster boards will be available for the entire time of the duration of the congress and will be located in the foyer of the Bellevue hotel.

Young Investigators Poster Competition:

Posters of PhD. students in the Young Investigators Poster Competition (registered via the registration form **Student (ISIC card, ≤30 years)**) will be presented during one of the poster sessions and evaluated by Poster Awards Committee. Presentors will present their results in front of their posters, presentations **should not exceed 3 minutes**.

Three best posters from the Young Investigators Poster Competition will be awarded with diploma and a financial award



CONGRESS PROGRAMME

Sunday 10.9.2023

- 10:00 - 18:30 **REGISTRATION** /Foyer Hotel Bellevue/Accommodation of participants - **14:00**
- 16:30 – 17:00 **OPENING CEREMONY (Congress Hall Grand Bellevue)**
Welcome (Ján Turňa – president of SSBMB, Libor Grubhoffer – president of ČSBMB)
Presentation of commemorative SSBMB medals
Award ceremony of Josef V. Košťál for significant scientific contribution in the field of biochemistry and cellular and molecular biology
Ján Turňa (Department of Molecular Biology, Comenius University, Bratislava): **50 years of recombinant DNA - past, present and future.**
- 17:00 - 18:00 **Plenary Lecture (Congress Hall Grand Bellevue)**
Andrea Fleig (Biomedical Research at The Queen's Medical Center Honolulu County, Hawaii, USA): **Cannabinoids as Modulators of Calcium Signaling and Inflammation.**
- 19:00 - 21:00 **Welcome Reception**

Monday 11.9.2023

8:00 -18.30

REGISTRATION /Foyer Hotel Bellevue/

9:00 - 9:50

Plenary Lecture (Bellevue I):

Ulrike Stein (Experimental and Clinical Research Center, Charité - Universitätsmedizin Berlin and. Max-Delbrück Center for Molecular Medicine): **Restrict cancer metastasis - save patient life: Translating gene discovery into clinical application.**

10:00 -11:30

Lectures in parallel Sections

Molecular basis of disease and therapy (Bellevue I)

Martin Kolísek - chair

(Comenius University in Bratislava, Jessenius Faculty of Medicine)

Silvia Pastoreková – chair

(Biomedical Center SAS, Bratislava)

10:00 - 10:30

Šárka Pospíšilová (Medical faculty, Masaryk University, Brno): **Molecular genetic changes in lymphoid malignancies and their impact on the pathogenesis, prognosis and molecular evolution of the disease** (ČSBMB J.V.Koštír prize talk).

10:30 - 10:50

Jörg Aschenbach (Institute of Veterinary Biochemistry, Freie Universitaet Berlin, Germany): **Role of magnesium in energy and calcium homeostasis of dairy cows - translations to humans.** - invited speaker

10:50 - 11:10

Ralf Einspanier (Institute of Veterinary Biochemistry, Freie Universitaet Berlin, Germany): **Holistic analysis of gene expression (NGS, proteomics) and functions in animal diseases: Canine cancer and varroa treatment in honeybees as examples.** - invited speaker

11:10 - 11:30

Jürgen Vormann (Institute of Veterinary Biochemistry, Freie Universitaet Berlin, Germany): **Magnesium and acid-base balance in aging.** - invited speaker

Cancer Cell Signaling, Regulations & Xenobiochemistry (Bellevue II)

Albert Breier - chair

(Centre of Biosciences SAS, Bratislava)

Miroslav Machala - chair

(Veterinary Research Institute, Brno)

10:00 - 10:30 Miroslav Machala (Veterinary Research Institute, Brno):
Novel aspects of Benzo[a]pyrenes toxicity.

10:30 - 10:55 Angéla Békési (Institute of Enzymology, Research Centre for
Natural Sciences, Hungarian Academy of Sciences,
Budapest): **Cell responses upon thymidylate synthase
inhibitory treatments differ in multiple molecular and
phenotypic aspects.**

10:55 – 11:20 Jakub Styk (Geneton Ltd., Bratislava, Slovakia, Institute of
Medical Biology, Genetics and Clinical Genetics, Faculty of
Medicine, Comenius University): **Unveiling The Potential Of
Liquid Biopsy: Non-Invasive Cancer Screening For Early
Detection And Preventive, Predictive And Personalized
Medicine.**

11:30 -12:00 Coffee Break

12.00 - 13.00 Lectures in parallel Sections

Molecular basis of disease and therapy (Bellevue I)

Martin Kolisek - chair

(Comenius University in Bratislava, Jessenius Faculty of Medicine)

Silvia Pastoreková – chair

(Biomedical Center SAS, Bratislava)

12:00 - 12:20 Martin Kolisek (Comenius University in Bratislava,
Jessenius Faculty of Medicine): **Identification of
multivariate mitochondrial fitness algorithm in diagnostics
of Parkinson's disease.**

- 12:20 - 12:40** **Petra Hnilicová** (Comenius University in Bratislava, Jessenius Faculty of Medicine): **On the interface between muscle wasting and central neurodegeneration.**
- 12:40 - 13:00** **Zuzana Tatarková** (Comenius University in Bratislava, Jessenius Faculty of Medicine): **Aging and the role of MAMs in the protection of the postischemic heart.**

***Cancer Cell Signaling, Regulations & Xenobiochemistry* (Bellevue II)**

Albert Breier - chair

(Centre of Biosciences SAS, Bratislava)

Miroslav Machala - chair

(Veterinary Research Institute, Brno)

- 12:00 - 12:20** **Ewelina Zarakowska** (Collegium Medicum Bydgoszcz, Nicolaus Copernicus University Toruń, Poland): **Impact of vitamin C supplementation on the epigenetic modifications in DNA and mRNA expression of vitamin C transporter genes in chronic lymphocytic leukemia.**
- 12:20 - 12:40** **Veronika Huntošová** (Faculty of Science, P. J. Šafárik University in Košice): **Autophagy and apoptosis switching during photo-activation of cancer cells.**
- 12:40 -13:00** **Albert Breier** (Faculty of Chemical and Food Technology Slovak University of Technology in Bratislava): **Interplay between P-glycoprotein mediated drug resistance and the LPHN1/GAL-9/TIM-3 signaling pathway.**
- 13.00 - 14.30** **Lunch**
- 14:30 -16:00** **Lectures in parallel Sections**

Recombinant protein production (Kristal Lounge)

Stanislav Stuchlík – chair

(Department of Molecular Biology, Faculty of Natural Sciences, Comenius University in Bratislava)

Michaela Wimmerová – chair

(National Centre for Biomolecular Research, Faculty of Science, Masaryk University, Brno)

- 14:30 – 15:00** **Martin Toul** (Loschmidt Laboratories, Dept. of Exp. Biology, Faculty of Science, Masaryk University, Brno, 2. RECETOX, Faculty of Science, Masaryk University, 3. International Clinical Research Center, St. Anne's University Hospital Brno): **Rational protein engineering driven by kinetics.** (ČSBMB J.V.Koštíř prize talk)
- 15:00 – 15:20** **Ileana C. Farcasanu** (University of Bucharest, Faculty of Chemistry, Romania): **Hexatriacontahexapeptides designed as metal-binding Tags.**
- 15:20 – 15:40** **Veronika Hovanová** (Center for Interdisciplinary Biosciences, Technology and Innovation Park, P.J. Šafárik University, Košice, Department of Biophysics, Faculty of Science, P.J. Šafárik University, Košice, Department of Biomaterials, Faculty of Engineering Science, Universität Bayreuth, Department of Biochemistry, Faculty of Science, P.J. Šafárik University, Košice): **Modulating the properties of recombinant spider silk protein eADF4(C16) hydrogels.**
- 15:40 – 16:00** **Ľubica Kormanová** (Department of Molecular Biology, Faculty of Natural Sciences, Comenius University in Bratislava): ***Vibrio natriegens*: A promising expression host for the production of "difficult-to-express" recombinant proteins.**

Postranslational Modifications, Glycobiology (Silver Lounge)

Ján Tkáč - chair

(Institute of Chemistry SAS, Bratislava)

- 14:30 - 15:00** **Michaela Wimmerová** (National Centre for Biomolecular Research, Faculty of Science, Masaryk University, Brno): **Protein glycosylation: synthesis, significance in health and disease, and its specific detection by lectins.**

- 15:00 - 15:30** **Filip Melicher** (Masaryk University, Brno): **Production and crystallization of lectin from *Photophabodus laumondii*.**
- 15:30 - 16:00** **Ján Tkáč** (Institute of Chemistry SAS, Bratislava): **Disease diagnostics by analysis of glycans.**
- 16:00 -16:30** **Coffee Break**
- 16:30 -17:30** **Lectures in parallel Sections**

***Recombinant protein production* (Kristal Lounge)**

Stanislav Stuchlík - chair

(Department of Molecular Biology, Faculty of Natural Sciences, Comenius University in Bratislava)

Michaela Wimmerová - chair

(National Centre for Biomolecular Research, Faculty of Science, Masaryk University, Brno)

- 16:30 - 16:50** **Eva Struhárňanská** (Department of Molecular Biology, Faculty of Natural Sciences, Comenius University in Bratislava): **Production of recombinant peroxidases, their characterization and potential use.**
- 16:50 - 17:10** **Marek Korsák** (Central European Institute of Technology, Masaryk University, National Centre for Biomolecular Research, Faculty of Science, Masaryk University): **Production of recombinant lectin PluLec from *Photorhabdus luminescens* for neutron crystallography and its structure-functional characterization.**
- 17:10 - 17:30** **Carlos Díaz** (Center for Interdisciplinary Biosciences – Technology and Innovation Park, University of Pavol Jozef Šafárik in Košice, Department of Biophysics, Faculty of Science, University of Pavol Jozef Šafárik in Košice): **Purification of selected haloalkane dehalogenase evolved by ribosome display.**
- 17:30 - 17:50** **Zoltan Lipinszki** (Institute of Biochemistry, Biological Research Centre, Szeged, Hungary): **Challenges of producing recombinant viral antigens suitable for post-vaccination antibody testing**

Postranslational Modifications, Glycobiology (Silver Lounge)

Ján Tkáč - chair

(Institute of Chemistry SAS, Bratislava)

- 16:30 - 16:50** **Veronika Vráblová** (Institute of Chemistry SAS, Bratislava):
Magnetic particles in bioaffinity interactions for implementation in the diagnostics of oncological diseases based on glycans.
- 16:50 - 17:10** **Adam Paulin Urminský** (Research Centre for Applied Molecular Oncology, Masaryk Memorial Cancer Institute, Brno, National Centre for Biomolecular Research, Faculty of Science, Masaryk University, Brno, Department of Comprehensive Cancer Care, Masaryk Memorial Cancer Institute, Brno): **Paclitaxel-induced neuropathy: biomarker insights from glycoproteomics.**
- 17:10 - 17:30** **Michaela Mikysková** (Masaryk University, Brno):
Structural characterization of the jacalin-related lectin from the mushroom *Calocera viscosa*
- 17:30 - 17:50** **Drobníčov Memorial 2023 - prize talk**

POSTER Session – 10.9-13.9.2023

- 18:00 - 19:00** **Poster discussion** (The organizing committee will award three best posters at the FEBS3+ congress closing ceremony)

The poster boards will be available for the entire time of the duration of the congress and will be located in the foyer of the Bellevue hotel.

Social event

Gala dinner 19:30 – 22:00

Tuesday, 12.9.2023

8:00 -18.30

REGISTRATION /Foyer Hotel Bellevue/

9:00 -9.50

Plenary Lecture (Bellevue I)

Marshall Bloom (National Institute of Allergy and Infection Diseases, USA): **New dimensions in the study of thick-borne virus infections.**

10:00 -11:30

Lectures in parallel Sections

Viruses, Bacteria, Protozoa & Parasites (Bellevue I)

Anton Horváth – chair

(Department of Biochemistry, Faculty of Natural Sciences, Comenius University in Bratislava)

Libor Grubhoffer – chair

(Biology Centre CAS, České Budějovice)

10:00 – 10:30

Vyacheslav Yurchenko (University of Ostrava, Life Science Research Centre, Ostrava): **Catalase is detrimental for *Leishmania* virulence (with notes on evolution of catalases in *Trypanosomatidae*).**

10:30 – 10:45

Ľubomíra Chmelová (University of Ostrava, Life Science Research Centre, Ostrava): **Isocitrate dehydrogenases of trypanosomatids.**

10:45 – 11:00

Ingrid Sveráková (Department of Biochemistry, Faculty of Natural Sciences, Comenius University, Bratislava; Institute of Parasitology, Biology Centre, Czech Academy of Sciences, České Budějovice; Life Science Research Centre, Faculty of Science, University of Ostrava): **An unusual composition of mitochondrial pyruvate dehydrogenase complex of diplomonids, widespread marine protists.**

11:00 – 11:15

Barbora Bučková (Department of Biochemistry, Faculty of Natural Sciences, Comenius University, Bratislava): **Bioenergetics of marine protist *Paradiplonema papillatum*.**

11:15 – 11:30

Gabriel Demo (Central European Institute of Technology, Masaryk University, Brno; Department of Biology, Niigata University, Niigata, Japan): **Ribosome hibernation in *Archea*.**

Proteomics (Bellevue II)

Peter Baráth- chair

(Institute of Chemistry SAS, Bratislava)

Jiří Dresler - chair

(Military Health Agency, Ministry of the Interior of the Czech Republic, Prague)

- | | |
|----------------------|---|
| 10:00 – 10:30 | Vladimír Havlíček (Institute of Microbiology of the Czech Academy of Sciences, Prague): Infectious site molecular mapping |
| 10:30 – 10:45 | Adam Pap (Single Cell Omics Advanced Core Facility, Hungarian Centre of Excellence for Molecular Medicine, Laboratory of Proteomics Research, Biological Research Centre, Eotvos Lorand Research Network (ELKH) Szeged, Hungary): Mass spectrometric characterozition of O-glycopeptides. |
| 10:45 – 11:00 | Marek Šebela (Department of Biochemistry, Faculty of Science, Palacký University, Olomouc): Enzyme activity assays by MALDI-TOF mass spectrometry. |
| 11:00 – 11:15 | Zuzana Kalaninová (Faculty of Science, Charles University, Prague, BioCeV - Institute of Microbiology of the Czech Academy of Sciences, Vestec): Proline semi-specific enzymes in the spotlight: The role of AnPEP in structural proteomics. |
| 11:15 – 11:30 | Maksym Danchenko (Institute of Plant Genetics and Biotechnology - Plant Science and Biodiversity Centre, Institute of Chemistry, Slovak Academy of Sciences, Institute of Hydrobiology of National Academy of Sciences of Ukraine): How do aquatic plants cope with pathogens in Chernobyl environment? |
| 11:30 -12:00 | Coffee Break |
| 12:00 -13:00 | Lectures in parallel Sections |

Viruses, Bacteria, Protozoa & Parasites (Bellevue I)

Anton Horváth – chair

(Department of Biochemistry, Faculty of Natural Sciences, Comenius University in Bratislava)

Libor Grubhoffer – chair

(Biology Centre CAS, České Budějovice)

- 12:00 – 12:15** **Hana Drahovská** (Department of Molecular Biology, Faculty of Natural Sciences, Comenius University in Bratislava): **Characterization of bacteriophages infecting *E. coli* and *Cronobacter*.**
- 12:15 – 12:30** **Monika Záhorská** (Department of Biochemistry, Faculty of Natural Sciences, Comenius University in Bratislava): **Pretomanid and delamanid as the newest players against tuberculosis.**
- 12:30 – 12:45** **Kristína Záhonová** (Department of Parasitology, Faculty of Science, Charles University, BIOCEV, Vestec, Czech Republic): **Comparative analysis of mitochondrion-related organelles in anaerobic amoebozoans.**
- 12:45 – 13:00** **Dušan Žitňan** (Institute of Zoology, SAV, Bratislava, Slovakia): **Expression and function of specific neuropeptide-receptor pathways in ticks.**

Companies' presentations (Silver Lounge)

- 12:00 - 12:20** **Balint Nagy** (Editor-in-Chief of journal MCP, Elsevier) and **Viorica Liebe Lastun** (Scientific Editor at Elsevier LTD): **How to successfully publish in MCP—Advancing Biology and Medicine through Omics and Bioinformatic** (Elsevier prize for four best lectures by young scientists in sections: Molecular Basis of Disease and Therapy; Regulation of Gene Expression, Epigenetics; Biotechnology And Technology Transfer In Life Sciences; DNA Sequencing – Methods and Applications).
- 12:20 - 12:40** **Kateřina Kolková** (SPECION, s.r.o): **Modern Methods for Life Science Applications.**
- 13.00 -14.30** **Lunch**

14:30 -16:00 Lectures in parallel Sections

***Biotechnology and Technology Transfer in Life Sciences* (Kristal Lounge)**

Pavol Miškovský - chair

(Cassovia New Industry Cluster, Košice)

Erik Sedlák - chair

(Technology and Innovation Park of the Pavol Jozef Šafárik University in Košice)

- 14:30 - 15:00 Pavol Miškovský** (Cassovia New Industry Cluster, Košice):
Application of nanotechnology-based sensors in environment, medicine and food control.
- 15:00 - 15:15 Martin Humeník** (Department of Biomaterials, Faculty of Engineering Science, University Bayreuth, Bayreuth):
Recombinant spider silk-DNA hybrids in materials engineering.
- 15:15 - 15:30 Ondrej Pös** (Comenius University Science Park, Bratislava, Slovakia; Geneton Ltd., Bratislava): **The potential of liquid biopsy in the era of precision medicine.**
- 15:30 - 15:45 Erik Sedlák** (Center for Interdisciplinary Biosciences, Technology and Innovation Park, Pavol Jozef Šafárik University Košice, Department of Biochemistry, Faculty of Science, P.J. Šafárik University): **Alternative design of flavoprotein-based photosensitizers.**
- 15:45 - 16:00 Ruta Lavinia Liliana** (University of Bucharest, Faculty of Chemistry): **Yeast surface display platform for the selection of GFP and mCherry nanobodies.**

Regulation of Gene Expression, Epigenetics (Bellevue II)

Andrea Šoltýsová - chair

(Department of Molecular Biology, Faculty of Natural Sciences, Comenius University in Bratislava)

Lucia Messingerová - chair

(Centre of Biosciences SAS)

- 14:30 - 15:00** **Aladar Pettko-Szandtner** (Laboratory of Proteomics Research, Biological Research Centre, Szeged, Institute of Plant Biology, Biological Research Centre, Szeged, Single Cell Omics Advanced Core Facility, Hungarian Centre of Excellence for Molecular Medicine, Szeged): **Proteomic stories/Determining the phosphorylation map of plant retinoblastoma-related (RBR)protein in proliferating tissues.**
- 15:00 - 15:20** **Jiří Vrba** (Department of Medical Chemistry and Biochemistry, Faculty of Medicine and Dentistry, Palacký University, Olomouc): ***In vitro* systems for investigating metabolic sulfation of natural polyphenols.**
- 15:20 - 15:40** **Agnes Tantos** (Research Centre for Natural Sciences, Budapest): **Regulatory roles of RNA binding in histone methyltransferases.**
- 15:40 - 16:00** **Andrea Šoltýsová** (Department of Molecular Biology, Faculty of Natural Sciences, Comenius University in Bratislava): **Epigenetic landscape in prognosis of uveal melanoma.**
- 16:00 -16:30** **Coffee Break**
- 16:30 -17:30** **Lectures in parallel Sections**

Biological membranes (Kristal Lounge)

Peter Račay - chair

(Department of Medical Biochemistry, Jessenius Faculty of Medicine, Comenius University in Bratislava)

Lucia Balážová - chair

(BMC SAS, Bratislava, Institute of Food, Nutrition and Health, ETH Zurich)

- 16:30 – 17:15** **Christos Chinopoulos** (Department of Medical Biochemistry, Semmelweis University, Budapest, Hungary): **Non-oxidative phosphorylation energy-harnessing pathways in respiration-impaired mitochondria.** - invited speaker
- 17:15 – 17:35** **Lucia Balážová** (BMC SAS, Bratislava, Institute of Food, Nutrition and Health, ETH Zurich): **Targeting GPR180 modulates glucose homeostasis by enhancing energy expenditure and insulin secretion.**
- 17:35– 17:55** **Peter Račay** (Comenius University in Bratislava, Jessenius Faculty of Medicine): **To be under stress, or not to be under stress, that is the question.**

DNA sequencing – methods and applications/Bioinformatics (Computational Biochemistry (Bellevue II)

Tomáš Szemes - chair

(Department of Molecular Biology, Faculty of Natural Sciences, Science Park, Comenius University in Bratislava)

Jaroslav Budiš - chair

(Science Park, Comenius University in Bratislava)

- 16:30 – 17:00** **Bálint Nagy** (University of Debrecen, Faculty of Medicine, Department of Human Genetics, Hungary): **Clinical application of cell-free nucleic acids.** - invited speaker
- 17:00 – 17:30** **Vladimír Beneš** (EMBL Heidelberg): **My forty DNA sequencing years.**
- 17:30 – 17:45** **Tomáš Szemes** (Department of Molecular Biology, Faculty of Natural Sciences, Science Park, Comenius University in Bratislava): **Narcos and Beyond: National Surveillance of SARS-CoV-2 and Other Pathogens.**

- 17:45 – 18:00** **Eubica Urbániková** (Institute of Molecular Biology, SAS):
Family GH13 trehalose synthases with a C-terminal maltokinase – an *in silico* study.
- 18:00 – 18:15** **Matej Hrnčiar** (Geneton s.r.o): **Identifying Microsatellite Instability through Analysis of Sequencing Data**
- 18:15 – 18:35** **Mariana Šatrová, Ondřej Pácalt** (GeneTiCA, s.r.o.):
Squeeze the genome with long reads
- 18:35 – 18:55** **Dmytro Omelchenko** (application specialist at Dynex, s.r.o.):
Sequencing by avidity: unprecedented data quality at affordable price.

Social event

19.30 - wine tasting

Wednesday 13.9. 2023

FEBS special Session on Research and Career skills (Bellevue I)

09:00 – 09:30 Václav Pačes (Institute of Molecular Genetics, Czech Academy of Science, Praha):

Teaching in Biochemistry, Biological Chemistry and Molecular Biology study programs (Bellevue I)

09:30 – 10:30

Mária Mareková - chair

(Medical University, Pavol Jozef Šafárik University in Košice)

Ján Lehotský - chair

(Department of Medical Biochemistry, Jessenius Faculty of Medicine, Comenius University in Bratislava)

09:30 – 09:40 **Mária Kožurková** (Department of Biochemistry, Institute of Chemical Sciences, Faculty of Science, Pavol Jozef Šafárik University in Košice): **Post-graduate study program in Biochemistry at the Faculty of Sciences of Pavol Jozef Šafárik University in Košice.**

09:40 - 09:50 **Mária Mareková** (Department of Medical and Clinical Biochemistry, Faculty of Medicine, Pavol Jozef Šafárik University in Košice): **How is changing role of chemical subjects in medical study curriculum last decade?**

09:50 - 10:00 **Boris Lakatoš** (Institute of Biochemistry and Microbiology, Faculty of Chemical and Food Technology, Slovak University of Technology, Bratislava): **Teaching of biochemistry at FCHPT STU – impact of new accreditation, COVID-19 and the project “ACCORD”.**

10:00 - 10:10 **Stanislav Stuchlík** (Department of Biochemistry, Faculty of Natural Sciences, Comenius University in Bratislava): **Bioscience study programs at the Faculty of Natural Sciences CU and Department of Molecular Biology.**

10:10 - 10:20 **Jiří Hudeček** (Department of Biochemistry, Faculty of Science, Charles University, Prague): **FEBS Educational Ambassadors**

10:20 - 11:00 **Coffee Break**

Workshop: Women in science (Gold Lounge)

Zuzana Staňáková - chair

(Slovak Centre of Scientific and Technical Information, Bratislava)

Jana Kottulová - chair

(Faculty of Arts, Comenius University, Bratislava)

- 11:00 - 11:20** **Zuzana Staňáková** (Slovak Centre of Scientific and Technical Information, Bratislava): **Inclusive Gender Equality in the Life Sciences. Importance of Using the Full Pool of Talents in Biochemistry.**
- 11:20 - 11:40** **Jana Kottulová** (Faculty of Arts, Comenius University, Bratislava): **Why should we care about gender equality in science?**
- 11:40 - 12:00** **Danica Zendulková** (Slovak Centre of Scientific and Technical Information, Bratislava): **Women in Slovak Life Sciences Projects.**

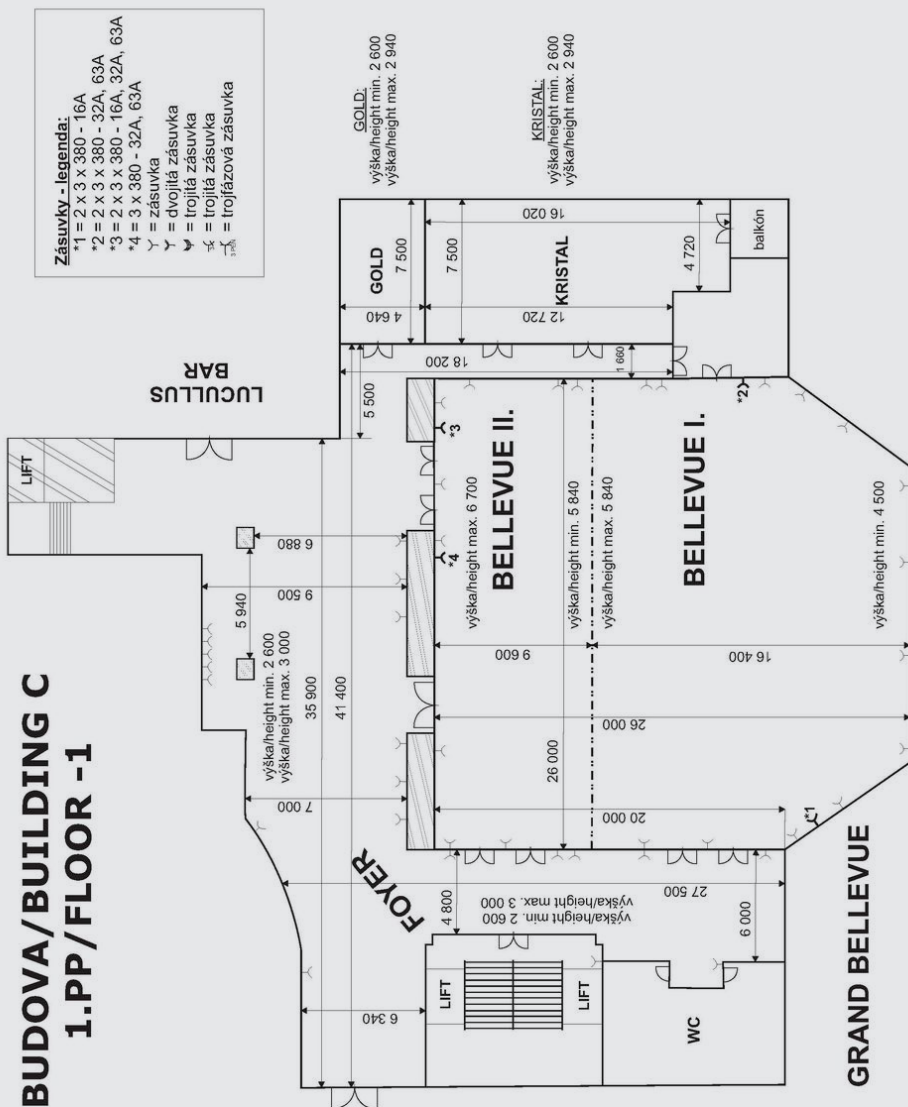
12:00 **Closing ceremony (Bellevue I):**

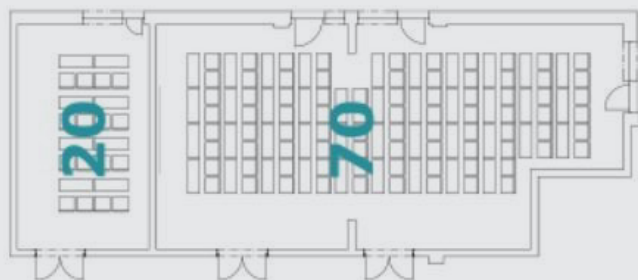
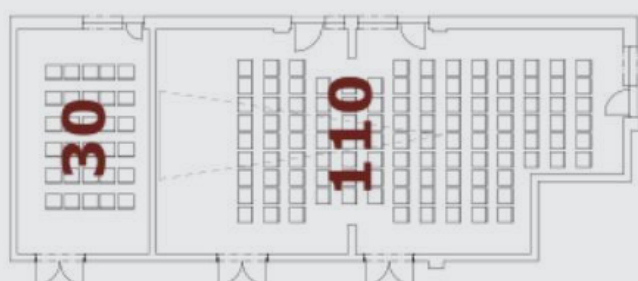
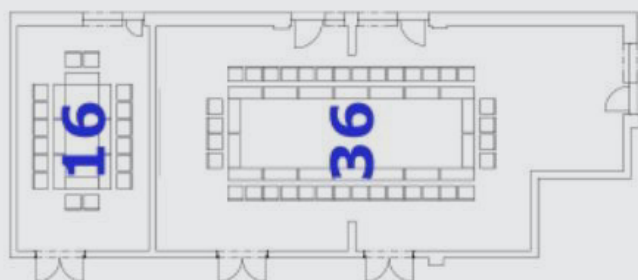
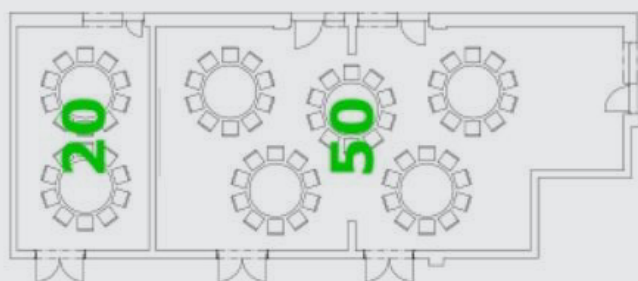
- **Poster prize winners announcement**
- **Elsevier prize winners announcement**
- **Lecture prize winners announcement** (Information about BIOTECH, IAB, GeneTiCA - prize for three best lectures by young scientists in four sections: Recombinant Protein Production; DNA Sequencing – Methods and Applications; Proteomics)

13:00 **Lunch**

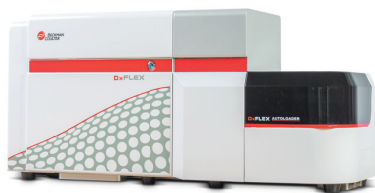


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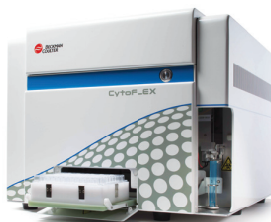




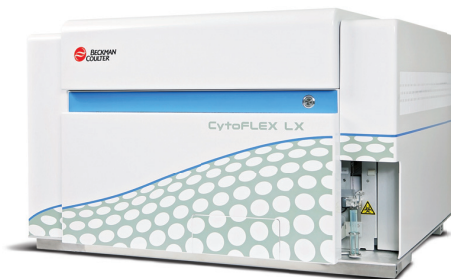
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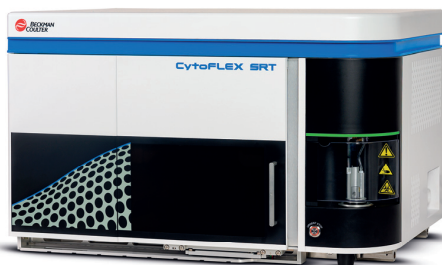
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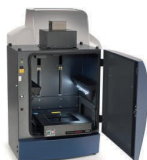
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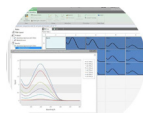
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