

## ČSBMB 2021 - List of posters

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P001	Abreu Celeste	Glycobiology, Postranslational Modifications	Biophysical analysis of the structurally conserved interaction between Galectin-1 and C-type lectin-like receptors of NK cells
P002	Antonyová Veronika	Enzymes, Coenzymes, Inhibitors	Targeting of the mitochondrial TET 1 protein by pyrrolo[3,2-b]pyrrole chelators
P003	Bencúrová Mária	Cell Signaling, Regulations	Myocardial ischemia-reperfusion injury-induced alterations in the homeostasis of Ca <sup>2+</sup> -regulating proteins
P004	Benešík Martin	Biotechnology	Elucidation and rational de-bottlenecking of semi-synthetic metabolism of D-xylose in <i>Pseudomonas putida</i>
P005	Biedermann David	Enzymes, Coenzymes, Inhibitors	Laccases and tyrosinases as tools for biotransformations of aromatics from renewable sources
P006	Brodňanová Mária	Marie Stiborová Memorial Symposium on Xenobiochemistry	Impact of Imipramine on Unfolded Protein Response and Mitochondrial Dysfunction
P007	Bučková Barbora	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	Oxidative phosphorylation of <i>Diplonema papillatum</i> under different cultivation conditions
P008	Čepcová Lucia	Marie Stiborová Memorial Symposium on Xenobiochemistry	Short acyl chain ceramides and their effect on cancer cells
P009	Dlapová Johana	Biotechnology	Production of mutant recombinant Taq DNA polymerase
P010	Drahovská Hana	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	Characterization of prophages from <i>Streptococcus agalactiae</i>
P011	Řurinová Eva	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	Usability of lanthanide salts for negative stain single particle analysis studied on bacteriophage helicase P4 and algae photosystem I complexes

<b>P012</b>	Dvořák Josef	Proteomics	Identification of procalcitonin in septic patients serum by affinity surfaces and mass spectrometry
<b>P013</b>	Dvořáková Zuzana	DNA, RNA, Gene Expression, Epigenetics	Formation of DNA/RNA hybrid i-motifs
<b>P014</b>	Dyčka Filip	Proteomics	Studying of NS3 and NS5 protein interaction of tick-borne encephalitis virus using mass spectrometry
<b>P015</b>	Faltinek Lukáš	Glycobiology, Postranslational Modifications	Characterization of monomeric lectin PLL3 from <i>Photobacterium laumondii</i>
<b>P016</b>	Flores-Ramirez Gabriela	Proteomics	Infection with <i>Coxiella burnetii</i> triggers host defence responses in human macrophages in a time-dependent manner
<b>P017</b>	Flores-Sanchez Isvett Josefina	Proteomics	Metalloproteomic Analysis from Soybean Roots Treated with Nanomolar Concentrations of Cadmium
<b>P018</b>	Frýbortová Veronika	Marie Stiborová Memorial Symposium on Xenobiochemistry	EFFECT OF COLITIS ON EXPRESSION AND ACTIVITY OF MAIN ENZYMES OF DRUG BIOTRANSFORMATION – CYTOCHROMES P450.
<b>P019</b>	Fussy Zoltan	DNA, RNA, Gene Expression, Epigenetics	Genome-wide methylation analysis in germline cells of common carp ( <i>Cyprinus carpio</i> L.)
<b>P020</b>	Galádová Helena	Biochemistry and Molecular Biology of Plants	Purification of myrosinase from <i>Lepidium sativum</i> seeds employing a novel affinity chromatography resin with the 4-(methylsulfinyl)butyl ligand attached via thiourea group
<b>P021</b>	Garčárová Ivana	Biotechnology	Multifunctional, Anti-oxidant and Anti-amyloidogenic Cerium Oxide Nanoparticles
<b>P022</b>	Gardian Zdenko	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	The cryo-electron microscopy model of photosynthetic core complex of the aerobic anoxygenic phototrophic Gammaproteobacterium <i>Congregibacter litoralis</i> .
<b>P023</b>	Gašparik Norbert	Proteomics	<sup>19</sup> F labelling of 14-3-3ζ recombinant protein for <sup>19</sup> F NMR spectroscopy
<b>P024</b>	Gašparovič Henrich	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	The effect of altered acylation patterns of phosphatidyl-myo-inositol mannosides on formation of mycobacterial biofilms

<b>P025</b>	Gondáš Eduard	Metabolomics	Metabolism of leucine in human cancer cells
<b>P026</b>	Gonepogu Vijaya Geetha	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	dynamics and isolation of guanine crystals from Chromera velia
<b>P027</b>	Grinkevich Pavel	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	Structural studies of RNA-translocating P4 protein from $\phi$ 8 bacteriophage
<b>P028</b>	Halbeisen Marco	Computational Biochemistry, Molecular Modeling	Mechanism of RNA mediated phosphate release from the active site of the tick-borne encephalitis virus helicase.
<b>P029</b>	Hamšíková Marie	Biotechnology	Changes in binding specificity of PDZ3 of ZO-1 caused by domain fusion
<b>P030</b>	Hatalová Tereza	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	LAMPions in COVID diagnostics
<b>P031</b>	Havlíčková Petra	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	Structural and Functional Studies of TBEV Non-Structural Protein 5
<b>P032</b>	Hejduk Libor	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	Resonance assignment and secondary structure prediction of DbpA from European Borrelia – case study of Borrelia afzelii
<b>P033</b>	Híveš Márk	DNA, RNA, Gene Expression, Epigenetics	Genetic variants in cell cycle regulators and association with prostate cancer risk in Slovak men
<b>P034</b>	Hodek Petr	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	Chicken antibody in the fight against SARS-CoV-2
<b>P035</b>	Hofrová Alena	Proteomics	Transient structural propensities of full-length human Tau protein investigated by non-uniformly sampled NMR spectroscopy
<b>P036</b>	Hovorková Michaela	Enzymes, Coenzymes, Inhibitors	Engineering of $\beta$ -galactosidase BgaD-A: Galactosynthase or Transgalactosidase?
<b>P037</b>	Hriňová Kristína	Biotechnology	Production of M-MuLV reverse transcriptase in E. coli expression systém

<b>P038</b>	Chaima Bensaoud	Proteomics	Proteome analysis of Ixodes ricinus saliva reveals sialoproteome composition in different feeding conditions and tick molecules found at the tick-host interface
<b>P039</b>	Chauhan Prashant	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	Role of lineage-specific mitoribosomal assembly factor mtSAF24 in Trypanosoma brucei
<b>P040</b>	Choruzý Natalia	Pathobiochemistry & Clinical Biochemistry, Cancer	p-coumaric acid inhibits proliferation of A172 glioblastoma cell line and stimulates apoptosis via intrinsic pathway
<b>P041</b>	Chovančíková Petra	Cell Signaling, Regulations	Dissecting the response of yeast Saccharomyces cerevisiae to cold plasma treatment
<b>P042</b>	Chromíková Zuzana	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	Microbial strategies to fight chromate stress
<b>P043</b>	Imrichová Denisa	Marie Stiborová Memorial Symposium on Xenobiochemistry	Cell Death Effects Induced by Sulforaphane and Allyl Isothiocyanate on P-glycoprotein Positive and Negative Variants in L1210 Cells
<b>P044</b>	Indra Radek	Marie Stiborová Memorial Symposium on Xenobiochemistry	Metabolism of tyrosine kinase inhibitors – various effect of pH
<b>P045</b>	Jahodová Iveta	Cell Signaling, Regulations	Phosphomimetic mutations of GAT1 serine 594 modulate transporter PDZ interaction with PSD95
<b>P046</b>	Jain Minal	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	Cleavage of Trypanosoma brucei FoF1-ATP synthase subunit alpha: A Unique attribute
<b>P047</b>	Janotík Adam	Biochemistry and Molecular Biology of Plants	Molecular background of $\beta$ -Aminobutyric acid-induced plant resistance
<b>P048</b>	Javorová Rachel	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	Activation strategy for silent secondary metabolite gene clusters in Streptomyces
<b>P049</b>	Ječmen Tomáš	Proteomics	Separation of human IgG glycopeptides using different mixed-mode hydrophilic interaction/ion-exchange liquid chromatography stationary phases

<b>P050</b>	Kaftan David	Biochemistry and Molecular Biology of Plants	Ultrastructure, physiology and photosynthesis of <i>Sediminicoccus rosea</i>
<b>P051</b>	Kamenický Michal	Proteomics	PsbO – an extrinsic protein of Photosystem II studied by nuclear magnetic resonance spectroscopy
<b>P052</b>	Káňová Kristýna	Marie Stiborová Memorial Symposium on Xenobiochemistry	Biophysical Properties of Silymarin Flavonoids and Their Halogenated Derivatives
<b>P053</b>	Kaščáková Barbora	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	Molecular-biology and structural study of Avian orthoreovirus non-structural proteins
<b>P054</b>	Khanna Ritesh	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	The role of extracellular vesicles in tick-borne encephalitis virus transmission and pathogenesis
<b>P055</b>	Kitzler Christian Manuel	Cell Signaling, Regulations	Modulations of coiled-coil interactions assessed by NMR directed mutations of calcium channel proteins
<b>P056</b>	Koník Petr	Proteomics	Profiling protein expression in <i>Synechocystis</i> using quantitative proteomics
<b>P057</b>	Korandová Zuzana	Membranes, Bioenergetics	Molecular mechanism of pathogenesis in patients with mutation in mitochondrial RNA polymerase
<b>P058</b>	Kormanec Jan	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	Characterization of biosynthesis and regulation of the aromatic polyketide antibiotic auricin in <i>Streptomyces lavendulae</i> subsp. <i>lavendulae</i> CCM 3239
<b>P059</b>	Kotounová Eliška	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	Imaging of tick-borne encephalitis virus replication in mammalian host cells
<b>P060</b>	Kozelková Tereza	Proteomics	Proteomic insight into the midgut of the hard tick <i>Ixodes ricinus</i> during its development
<b>P061</b>	Křístková Barbora	Enzymes, Coenzymes, Inhibitors	New fungal aldoxime dehydratase for nitrile bioproduction
<b>P062</b>	Kusaczuk Magdalena	DNA, RNA, Gene Expression, Epigenetics	Epigenetic modulator panobinostat (LBH589) inhibits activity of histone deacetylases and suppresses proliferation of glioblastoma U118MG cells

<b>P063</b>	Kuvelja Andjela	Biochemistry and Molecular Biology of Plants	Photosynthetic activity and element distribution in <i>Capsicum annum</i> leaves infected with <i>Botrytis cinerea</i> under different Mn and Zn supply
<b>P064</b>	Levarski Zdenko	Biotechnology	Production of plant DEK1 fragments for functional studies
<b>P065</b>	Majerčíková Zuzana	Pathobiochemistry & Clinical Biochemistry, Cancer	Synergistic effect of inhibitors on temozolomide-treated brain tumor cell lines
<b>P066</b>	Marković Aleksandra	Membranes, Bioenergetics	Ketogenic diet mitigates pathogenic phenotype of TMEM70 in mouse knockout model
<b>P067</b>	Martinec Jan	Biochemistry and Molecular Biology of Plants	Pleiotropic senescence effects of high magnesium are linked with phospholipase Dα1 in <i>Arabidopsis</i> plants
<b>P068</b>	Martinez Yerena Jose Alberto	DNA, RNA, Gene Expression, Epigenetics	Identification of a biosynthetic gene cluster for Aetokthonostatin, a novel dolastatin from the “eagle-killer” cyanobacterium
<b>P069</b>	Mašková Hana	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	The detection of markers for early stage of the tick-borne encephalitis infection
<b>P070</b>	Mészáros Zuzana	Biotechnology	Mutant hypertransglycosylating GH20 β-N-acetylhexosaminidases for the synthesis of bioactive chitooligomers
<b>P071</b>	Nagaraj Pradeep	DNA, RNA, Gene Expression, Epigenetics	Transcription-translation coupling at the stages of translation initiation and elongation
<b>P072</b>	Nekvasilová Pavlína	Enzymes, Coenzymes, Inhibitors	Synthesis of human milk oligosaccharides using engineered fucosidases
<b>P073</b>	Novák David	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	Foam is needed on draft beer, but not in a wastewater treatment plants
<b>P074</b>	Nováková Renata	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	A stable vector based on linear plasmid pSA3239 for production of heterologous proteins and secondary metabolites in streptomycetes
<b>P075</b>	Nováková Slavomíra	Proteomics	Comparative proteomic and metabolomic analysis of human osteoblasts, differentiated from dental pulp stem cells, revealed signaling pathways promoting osteogenesis.

<b>P076</b>	Pál Adrian	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	Pretomanid and its mechanism of action in mycobacteria
<b>P077</b>	Pasák Michael	Pathobiochemistry & Clinical Biochemistry, Cancer	Mitochondrial parameters in acute glaucoma minipig model
<b>P078</b>	Polák Marek	Proteomics	Combination of Fast photochemical oxidation of protein and the Top-down mass spectrometry for structural characterization of protein/DNA complex
<b>P079</b>	Pospíšilová Tereza	Enzymes, Coenzymes, Inhibitors	Purification and characterization of a coagulation inhibitor from the gut of <i>Ixodes ricinus</i>
<b>P080</b>	Račay Peter	Pathobiochemistry & Clinical Biochemistry, Cancer	The Crosstalk between Proteasome Stress and Endoplasmic Reticulum Associated Degradation.
<b>P081</b>	Rathner Adriana	Proteomics	Interaction patterns of photosynthetic Psb proteins with cations revealed by solution nuclear magnetic resonance spectroscopy
<b>P082</b>	Rathner Petr	DNA, RNA, Gene Expression, Epigenetics	Targeting ribosomal protein uL29/L35 for LAMB3R635X repair in rare skin disease Epidermolysis Bullosa
<b>P083</b>	Rievajová Martina	Glycobiology, Posttranslational Modifications	<i>Microsporum canis</i> lectin
<b>P084</b>	Schmidt Monika	Enzymes, Coenzymes, Inhibitors	Novel biochemical assay for mitochondrial 17 $\beta$ -hydroxysteroid dehydrogenase type 10 inhibitors discovery
<b>P085</b>	Spiwok Vojtěch	Computational Biochemistry, Molecular Modeling	Anatomy of carbohydrate-protein interaction: Hevein domain HEV-32 example
<b>P086</b>	Stemmer Vitus	DNA, RNA, Gene Expression, Epigenetics	Initial solution nuclear magnetic resonance spectroscopy studies of ribosomal protein target eL40
<b>P087</b>	Strnad Martin	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	Adhesins and motility of tick-transmitted pathogen <i>Borrelia burgdorferi</i>
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<b>P089</b>	Stuchlík Stanislav	Biotechnology	Production and purification of a recombinant bacterial Mn <sup>2+</sup> -dependent lignin peroxidase in <i>E. coli</i>
<b>P090</b>	Šatka Štefan	Marie Stiborová Memorial Symposium on Xenobiochemistry	Effect of butyrate, a microbiome metabolite, on cytochromes P450 in female mice liver
<b>P091</b>	Šebela Marek	Proteomics	Quantification of pathogenesis-related proteins in wine
<b>P092</b>	Šeborová Karolína	DNA, RNA, Gene Expression, Epigenetics	Alteration of DNA repair genes in ovarian carcinoma patients treated by combination of taxanes and platinum derivates
<b>P093</b>	Škovierová Henrieta	Cell Signaling, Regulations	Human Fibroblasts and human Mesenchymal Stem Cells are functionally equivalents in tissue regeneration
<b>P094</b>	Šnebergerová Pavla	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	Plasmeprin IX/X orthologs in <i>Babesia</i> and their validation as novel drug targets
<b>P095</b>	Štefík Pavol	Marie Stiborová Memorial Symposium on Xenobiochemistry	Functionalized MoS <sub>2</sub> -based nanoconjugates targeting CD33 receptors of acute myeloid leukemia cells
<b>P096</b>	Štěrbová Jarmila	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	Bioorthogonal non-canonical amino acid tagging and Click-on-membrane reaction as a method for identification of differently expressed proteins during TBEV infection of human neural cells
<b>P097</b>	Šubert Denis	DNA, RNA, Gene Expression, Epigenetics	Scaffold attachment factor A binding affinity to the oct4 promoter region is affected by the local secondary structure of DNA
<b>P098</b>	Šubr Zdeno W.	Biochemistry and Molecular Biology of Plants	Sensitivity and resistance to the cucumber mosaic virus: proteomic versus transcriptomic view
<b>P099</b>	Tomková Mária	Biotechnology	Preparation of a ribosome extract for an in vitro protein evolution through ribosome display
<b>P100</b>	Tomková Štěpánka	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	Challenges behind recombinant production of tick-borne encephalitis virus non-structural protein 1 for in vitro studies
<b>P101</b>	Václavíková Radka	DNA, RNA, Gene Expression, Epigenetics	The role of ABCC3 and CPS1 in taxane resistance and therapeutic response of ovarian carcinoma



<b>P102</b>	Věchtová Pavlína	Glycobiology, Posttranslational Modifications	Expression of glycan biosynthetic enzymes in Ixodes ricinus tick life stages
<b>P103</b>	Veselá Ludmila	DNA, RNA, Gene Expression, Epigenetics	In vivo fluorescent tracking system of coupled transcription-translation
<b>P104</b>	Víglaš Ján	Marie Stiborová Memorial Symposium on Xenobiochemistry	The response of Neurospora crassa to antifungal active azoles at a molecular level
<b>P105</b>	Wagnerová Pavla	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	The comparison of SARS-CoV-2 sampling, infectious rate, and variant distribution in South Bohemia
<b>P106</b>	Wong Jonathan	Biochemistry and Molecular Biology of Viruses, Bacteria & Parasites	Identification of the machinery for membrane insertion of mitochondrially encoded proteins in Trypanosoma brucei
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<b>P112</b>	Kulhánek Petr	LATE POSTER	Bending of Canonical and G/T Mismatched DNAs
<b>P113</b>	Slováková Marcela	LATE POSTER	Immobilized enzyme-based method for protein phosphorylation
<b>P114</b>	Danklmaier Anna	LATE POSTER	Being a bit sticky is a good thing: Understanding the role of adhesion proteins in bacterial motility

<b>P115</b>	Gala Michal	LATE POSTER	Application of machine learning methods in biosciences
<b>P116</b>	Saha Subhasish	LATE POSTER	Combination of genome mining and direct pathway cloning (DiPaC) to unlock a silent and novel Microviridin biosynthetic gene cluster from cyanobacteria through heterologous expression
<b>P117</b>	Petelák Aleš	LATE POSTER	Single-molecule imaging of interaction dynamics between G protein-coupled receptors and G proteins
<b>P118</b>	Cihlář Ondřej	LATE POSTER	First Steps of Environmental DNA (eDNA) Processing in Laboratory
<b>P119</b>	Macho Markéta	LATE POSTER	Learn a language and you will avoid a war“ – Specificity of signalling between a cyanobacterium and its epibiont