

CSBMB 2025_List of posters

27.08.2025

	Surname	Name	Topic	Titul
P01	Alblová	Miroslava	ELIXIR Track 1: Bioinformatics and Structural Biology	Centre of Molecular Structure – Protein Production and Technologies for Structural and Biophysical Analysis
P02	Al-Maghrebi	May	Redox Biochemistry and Sensors	The Regulatory Effects of JAK2/STAT3 on Spermatogenesis and the Redox Keap1/Nrf2 Axis in an Animal Model of Testicular Ischemia Reperfusion Injury
P03	Antal	Matúš	Cells and Organelles	GPR180 Receptor Modulates Insulin Secretion In β -cells Via Mitochondrial ATP Production
P04	Artimovič	Peter	Bioinformatics and Structural Biology	Machine Learning and Network-based Transcriptomics Reveal Impaired Regulatory Patterns in Recurrent Implantation Failure
P05	Babulic	Patrik	Bioinformatics and Structural Biology	The N-Terminal Region Of Lactoferrin Targets Spike Protein Of SARS-CoV-2: In Vitro And In Silico Evidence
P06	Balážová	Lucia	Proteomics	Scratching the Surface: State-Dependent Proteomic Signatures of Extracellular Vesicles Secreted by Hepatic Stellate Cells
P07	Balážová Faltejskoá	Kateřina	DNA, RNA, Gene Expression, Epigenetics	Non-consensus Flanking Sequence of Hundreds of Base Pairs around in Vivo Binding Sites: Statistical Beacons for Transcription Factor Scanning
P08	Bednářová	Šárka	Enzymes	In Vitro Phosphorylation Using Tyrosine Kinase Src Immobilised on Magnetic Beads and Detection of Activity
P09	Berka	Karel	ELIXIR Track 1: Bioinformatics and Structural Biology	5 Years of AlphaFoldology
P10	Brodňanová	Mária	Molecular Basis of Diseases	Exploring the Role of CHIP in the Pathogenesis of Digenic Spinocerebellar Ataxia Type 17
P11	Buráňová	Tereza	Glycobiology	Mysteries of Lectins in Opportunistic Pathogens: Two Domains – One Purpose?
P12	Burska	Daniela	Molecular Basis of Diseases	Impact of Two Novel Variants in Mitochondrial Complex III Structural Subunits UQCRC2 and MT-CYB on the System of Oxidative Phosphorylation
P13	Cibulka	Michal	Membranes, Bioenergetics	Effect of Magnesium and TRPM7 Channel Activity Modulators on the Transcription of Genes Encoding Magnesium Transport Systems
P14	Černý	Jiří	Viruses, Microbes and Parasites	CZU mobilAB: A Mobile Modular Laboratory for Rapid Field Diagnostics of Infectious Diseases
P15	Doupovec	Vladan	Biotechnology	Recombinant Expression of Honey Bee Antimicrobial Peptides in the Pichia Pastoris
P16	Ďuračková	Monika	Enzymes	A0A161ZKU8_DAUCS Protein – Identification, Production, Purification, and Characterization
P17	Ďurišová	Kamila	Xenobiotics	Synergistic Cytotoxic Effect of Kryptoleurine in Combination With Cisplatin on A549 Carcinoma Cells
P18	Dvořáková	Anna	Viruses, Microbes and Parasites	Tickborne or Not? Exploring the Role of Ticks in Neglected Zoonotic Bacterial Transmission
P19	Evinová	Andrea	Membranes, Bioenergetics	Evaluation Of Mitochondrial Bioenergetics and Morphology In SH-SY5Y Cells Treated With K _{ATP} Channel Modulators: Implications for Early Neurodegenerative Mechanisms
P20	Feidakis	Christos	Bioinformatics and Structural Biology	Addressing AI's Existential Crisis in the Protein Modelling Multiverse
P21	Forinová	Michala	Redox Biochemistry and Sensors	Polymer Brush Interfaces for Rapid Pathogen Detection
P22	Fuertes	Gustavo	ELIXIR Track 1: Bioinformatics and Structural Biology	Structural Dynamics of Photoresponsive Proteins Containing Non-canonical Amino Acids
P23	Galgonek	Jakub	Bioinformatics and Structural Biology	TRIPLE: Transforming RDF Interoperability with Solid Pods for Next Level Experience
P24	Gášperová	Bronislava	Cells and Organelles	In Vitro Expansion of Dental Stem Cells: Insights into Proliferation and Cellular Aging
P25	Gavurníková	Gabriela	Education & Career in Life Science	The Impact of Bioinformatics Research in Life Sciences in Slovakia
P26	Gondáš	Eduard	Enzymes	Leucine Catabolism in Human Astrocytes: Metabolic Fate and 3-methylcrotonyl-CoA Carboxylase Expression
P27	Grubhoffer	Libor	Viruses, Microbes and Parasites	Sub-cellular Interacting Partners of the Tick-borne Encephalitis Virus Capsid Protein
P28	Gulyášová	Terézia	Cells and Organelles	Multimodality of Hypericin Loaded Upconversion Nanoparticles for Photodynamic Therapy of Breast Cancer
P29	Haasová	Eliška	Membranes, Bioenergetics	Programming of Skeletal Muscle by Ambient Temperature in Mouse Strains with Divergent Obesity Phenotypes
P30	Hammerová	Zuzana	ELIXIR Track 1: Bioinformatics and Structural Biology	Identification of Novel Mycobacterial Glycosyltransferases as Potential Targets for Antituberculosis Drug Development
P31	Hanyk	Jiří	Cells and Organelles	Effects of Phytocannabinoids In Human Skin Fibroblasts
P32	Hatina	Jiří	Molecular Basis of Diseases	Complexity of Regulation of Epithelial-mesenchymal Transition in Urothelial Carcinoma Progression
P33	Havlíková	Jana	Proteomics	Quantification of Monoclonal Antibodies in Pharmaceutical Matrices by Middle-up Capillary-electrophoresis Mass Spectrometry
P34	Hlaváč	Viktor	Molecular Basis of Diseases	The Use of Multiomics to predict the Clinical Outcome in Colorectal Carcinoma
P35	Horn	Martin	Viruses, Microbes and Parasites	Mapping the Schistosoma Degradome: A Platform for Characterizing Digestive Proteases in Schistosoma mansoni
P36	Hovanová	Veronika	Redox Biochemistry and Sensors	Designing Functional Biointerfaces with DNA and Polymers for Advanced Sensing
P37	Hudák	Ľuboš	Cells and Organelles	Inhibition of Mitochondrial Protease LONP1 and its Effect on Unfolded Protein Response in Mitochondria and Endoplasmic Reticulum in SH-SY5Y Cells
P38	Hudáková	Zuzana	DNA, RNA, Gene Expression, Epigenetics	The Expression of Selected LncRNAs in Glioma Cell Lines
P39	Hurdálek	Jan	Bioinformatics and Structural Biology	Protein Fusions of PDZ3_ZO-1 and G α 88: A Case Study of Domain Non-Modularity
P40	Husieva	Valeriia	Cells and Organelles	The Role Of Extracellular Vesicles In The Development Of Resistance To Hypomethylating Agents
P41	Jakubek	Milan	Enzymes	Novel Structure Motif for the Selective Inhibition of TET1 Protein Based on Perimidines
P42	Jambrich	Patrik	Cells and Organelles	Effect of the PERK inhibitor GSK2606414 on mitochondrial dysfunction induced by ER stress
P43	Jeon	Min Jeong	Biotechnology	Hair Growth Promotion by Marine Mucus via Erk/Akt Signalling Pathway



ČESKÁ SPOLEČNOST PRO
BIOCHEMII A MOLEKULÁRNÍ BIOLOGII



FEBS3+ Meeting: Unlocking the Secrets of Life



BIOCHEMISTRY CONGRESS

September 7 – 10, 2025, Prague, Czechia, National Library of Technology



WWW.CSBMB2025.CZ

P44	Jirásková	Kateřina	Enzymes	Benchmarking PETase Activity: A Step Toward Cross-Study Comparability
P45	Kadášová	Nina	Bioinformatics and Structural Biology	Pathogenicity Patterns within Protein Families
P46	Kapral	Filip	Artificial Intelligence	Mapping Protein Language: Exploring Amino Acid Functionality through Machine Learning
P47	Karatkevich	Ihar	Biotechnology	Increasing the Solubility of a Difficult-to-Express Protease via Non-Selective Protein Release into the Growth Medium
P48	Klápšřová	Veronika	Biotechnology	Protein Production Facility – DNA & Proteins for Your Research
P49	Kobets	Tatyana	Membranes, Bioenergetics	Postnatal Adaptation of Premature Newborns Characterized by Differential Regulation of Gene co-expression in Liver and Muscle
P50	Kolaja Dobrá	Jana	Education & Career in Life Science	E-learning in Medical Chemistry: Analysis of Student Engagement in a Mandatory Moodle Course
P51	Kolomiets	Lesia	Biotechnology	Effect of Silver Nanoparticles on the Stability of the EMAP II Protein and its Interaction with tRNA
P52	Kowalczyk	Weronika	Viruses, Microbes and Parasites	Porphyrinomas Gingivalis Supports Herpesviridae Infection and Reactivation
P53	Křivá	Alexandra	Biotechnology	Calcium Ions Effect On Protein Expression And Improving Purification Strategy Of Bacterial CGTase
P54	Kuczyńska	Martyna	Molecular Basis of Diseases	Dual Regulation of T Cell Activation and Autophagy on Calcium-dependent Pathway: New Insights into Autoimmune Pathophysiology
P55	Kucháříková	Veronika	Cells and Organelles	Exploring Statins in the Context of Personalized and Adjuvant Therapy for Pancreatic Ductal Adenocarcinoma
P56	Kureková	Magdaléna	Cells and Organelles	Effect of GRP78 Inhibition on Unfolded Protein Response in Neuronal Cells
P57	Loužecká	Karolína	Enzymes	Exploring Rhizobium etli-type L-Asparaginases: Unique Properties for Food Biotechnology
P58	Ludviková (Fiedler)	Anna	Viruses, Microbes and Parasites	Multidrug-Resistant Pseudomonas Aeruginosa: Exploring Adjuvant Strategies to Overcome Antibiotic Resistance
P59	Łyś	Aneta	DNA, RNA, Gene Expression, Epigenetics	The Functional role of the CENPL-210 Transcript and its Regulatory Interaction with DARS2 Overlapping Transcripts
P60	Mamić	Tomislav	DNA, RNA, Gene Expression, Epigenetics	Modulation of Naive Adaptation in CRISPR-Cas Immunity by DNA Helicases Involved in Replication and Repair
P61	Marek	Martin	ELIXIR Track 1: Bioinformatics and Structural Biology	Exploring how Deep-sea Shrimps Produce Light
P62	Martásek	Pavel	Molecular Basis of Diseases	Human Protoporphyrinogen Oxidase-Inhibiting Herbicides
P63	Mášová	Alice	DNA, RNA, Gene Expression, Epigenetics	Unraveling Cellular Complexity and Tissue Architecture with Advanced Transcriptomic Tools
P64	Mažerik	Jozef	Plants	The Plant-derived Secoiridoid Amarogentin Modulates Tracheal Contractility via Anti-inflammatory Mechanisms in Asthmatic Conditions
P65	Mečiaková	Martina	Molecular Basis of Diseases	Association between Progesterone Receptor Polymorphisms and Risk of Prostate Cancer in Slovak Population
P66	Mikysková	Michaela	ELIXIR Track 1: Bioinformatics and Structural Biology	Spore Wars: The Lectin Awakens
P67	Moos	Marek	Bioinformatics and Structural Biology	SPARQL Federated Query Debugging Tool
P68	Mráček	Tomáš	Membranes, Bioenergetics	COX6B1 Secures a Redox-sensitive Step in Early Cytochrome c Oxidase Assembly
P69	Paić	Antonia	Cells and Organelles	Exploring Cell Wall Diversity in S. Cerevisiae Identifies New Candidate Strains for Robust Bioengineering
P70	Poliaková	Alexandra	Proteomics	Identification of Protein Conjugates Designed for Targeted Photodynamic Therapy of Breast Cancers
P71	Pytlak	Karolina	Membranes, Bioenergetics	Role of BKCa / mitoBKCa Channel in Bronchial Epithelium under PM Exposure
P72	Rego	Ryan	Viruses, Microbes and Parasites	Grabbing On and Letting Go – Motility of the Lyme Disease Bacterium
P73	Rošu	Alexandru	Molecular Basis of Diseases	Cardiac Allograft Vasculopathy Diagnostic In Molecular Biology
P74	Rozpědek-Kamińska	Wioletta	Molecular Basis of Diseases	Use of Small-molecule PERK Inhibitor as a Targeted Therapy Against Lung Cancer
P75	Sitte	Martin	Bioinformatics and Structural Biology	Functional Characterisation of the Luminous Apparatus of the Sea Pen Pennatula phosphorea
P76	Slováková	Marcela	Biotechnology	Characterisation of EGF Containing Chitosan Submicroparticles and Study of Internalisation in the A549 Cell Line
P77	Soldatova	Irina	DNA, RNA, Gene Expression, Epigenetics	The Investigation of the Role of non-canonical Caps in RNA Localization
P78	Staniak	Karolina	Molecular Basis of Diseases	Modifications in Autophagic and Secretory Pathways in Cancer Cells Escaping from Senescence
P79	Stanic	Sara	Membranes, Bioenergetics	Central Regulation of Body Temperature and Energy Expenditure by FGF21
P80	Storchmannová	Kateřina	Membranes, Bioenergetics	Meta-Analysis of Permeability Literature Data Shows Possibilities and Limitations of Popular Methods
P81	Struhářňanská	Eva	Enzymes	Production and Purification of a Bacterial CGTase
P82	Svobodová	Gabriela	DNA, RNA, Gene Expression, Epigenetics	Time-dependent Development of MASLD and Gene Expression Alterations in a Murine Model of Nutritional Overload
P83	Šárková	Alice	Xenobiotics	Nitric Oxide Signalling in Development and Responses to Pesticide Exposure of Honey Bees
P84	Šatka	Štefan	Xenobiotics	Modulation of Cytochromes P450 by Microbial Metabolites: Insights into Urolithin C Mechanisms
P85	Šebela	Marek	Enzymes	MALDI-MS: a Good Option for Enzyme Activity Assays
P86	Šofranková	Lucia	Xenobiotics	A Closer Look at 5-Aminopyrazoles: Their Effects on Cell Death and Drug Resistance Pathways
P87	Špaldová	Jana	Xenobiotics	From Parkinson's to Leukemia: Repurposing Amantadine Derivatives for Drug-Resistant Acute Leukemia
P88	Štefík	Pavol	Xenobiotics	From Resistance to Receptivity: Vitamins A & D Flip the Script on Leukemia Drug Sensitivity via Sphingolipid Metabolism
P89	Štufková	Hana	Molecular Basis of Diseases	A Rare Variant MT-ATP6(NC_012920.1):m.8851T>C (p.Trp109Arg) Impairs Stability of F1Fo-ATP Synthase: Laboratory and Clinical Findings



P90	Šuchová	Katarína	Enzymes	Diversity of GH30 Xylanolytic Enzymes
P91	Takáčová	Lubomíra	Xenobiotics	The Quinolizidine Alkaloid - Cryptopleurin and Its Effect on Acute Leukemia
P92	Tedeschi	Guglielmo	Artificial Intelligence	Analysis and Sampling of Molecular Simulations by Adversarial Autoencoders
P93	Tekkara	Allan	Viruses, Microbes and Parasites	Seroprevalence of RVF, Coxiella, CBPP and CCHFV in Selected Districts of Northern Uganda
P94	Tomková	Mária	Biotechnology	Directed Evolution of Staphylokinase Improves Fibrinolytic Activity
P95	Valicová	Ivana	Cells and Organelles	Isolation and Characterisation of Human Cancer-Associated Fibroblasts Isolated from Pancreatic Cancer Tissue
P96	Vaněk	Ondřej	ELIXIR Track 1: Bioinformatics and Structural Biology	Structural Immunology of Natural Killer Cell Recognition
P97	Vanišová	Marie	Membranes, Bioenergetics	Mitochondrial Damage Mapping in Fibroblasts from a Patient with a Unique Combination of Huntington's Disease, Alzheimer's disease and Multisystem Atrophy
P98	Vít	Ondřej	Proteomics	Proteomic Evaluation of SDHB-Deficient Cell Model Versus Human PPGL Identifies Potential Therapeutic Target: SLC38A5
P99	Wesołowska	Olga	Molecular Basis of Diseases	Combination of Antipsychotic Phenothiazines with Modulators of Cholesterol Homeostasis as a Synergistic Formula with Potent Antiproliferative Activity in Colon Cancer Cells
P100	Yadav	Simran	Molecular Basis of Diseases	Validation of Circulating miRNAs as Early Biomarkers of Alzheimer's Disease in the 3xTg-AD Mouse Model
P101	Yildirim Koken	Gulnaz	Membranes, Bioenergetics	Quantitative Comparison of Extracellular Vesicles Isolated from Human Pericardial Fluid and Plasma
P102	Yoldi Vergara	Alberto	Xenobiotics	Effects of Phenethyl Isothiocyanate and Its Synthetic Derivative 1,4-chlorophenyl Isothiocyanate on Leukemic Cells in Relation to the Development of Drug Resistance
P103	Zahradník	Jiří	Viruses, Microbes and Parasites	Predicting the Unpredictable: In Vitro Evolution and the Origins of SARS-CoV-2 Omicron
P104	Zriniová	Ingrid	Membranes, Bioenergetics	Disruption of Lsp1 and LCB Degradation Affects Mitochondrial Functions in Saccharomyces Cerevisiae
P105	Pluskal	Daniel	LATE POSTER	IRiS – A Versatile Bioimaging Tool Inspired By A Nature-Evolved Bioluminescence Resonance Energy Transfer Complex
P106	Vávrová	Anna	Membranes, Bioenergetics	The Impact of Muscle Non-shivering thermogenesis on Energy Expenditure during Physical Activity