CZECH-BIOIMAGING CONFERENCE
Imaging Principles of Life 2025

POSTER SESSION

P-1 **Bibiána Baďurová, Biomedical Centre Martin, Jessenius Faculty of Medicine in Martin, Comenius University in Bratislava, Martin, Slovakia**
Development of 3D dental stem cell organoids and optimization of culture parameters for bone tissue applications

P-2 **Barbora Burýšková, Telight Brno s.r.o.**
Upgrade your microscope for gentle super-resolution

P-3 **Eva Dražanová, Institute of Scientific Instruments of the Czech Academy of Sciences, Brno**
Characterization of Ultra-High Frequency Oscillations Following Acute Intrahippocampal Administration of Kainic Acid in Mice

P-4 **Eva Ďurinová, BIOCEV, Faculty of Science, Charles University, Vestec**
IMCF at BIOCEV: Advanced Microscopy for Everyone

P-5 **Berwini Endaya, Institute of Biotechnology of the Czech Academy of Sciences, Vestec**
Imaging Liver: From Regeneration to Pathology

P-6 **Martina Nešpor Dadejová and Michal Franek, CEITEC, Masaryk University, Brno**
Adapting laser microirradiation and time-lapse imaging for in vivo analysis of DNA repair in plants

P-7 **Tomáš Groušl, Institute of Microbiology of the Czech Academy of Sciences, Prague**
Super-resolved yeast as a model of protein aggregation

P-8 **Daniel Hadraba, BioImaging Facility, Institute of Physiology of the Czech Academy of Sciences, Prague**
IPHYS Bioimaging facility and new hardware

P-9 **Iveta Haraštová, Institute of Scientific Instruments of the Czech Academy of Sciences, Brno**
^{1}H MRS reveals depression model, and chronic and acute pharmacological manipulation effects on the rat brain neurochemical profile

P-10 **Amir Hashemi, Brno University of Technology, Brno**
Imaging-Guided Evaluation of Metal Oxide Nanoparticle-Enhanced Scaffolds for Bone Regeneration

P-11 **Anna Havlíčková, Institute of Scientific Instruments of the Czech Academy of Sciences, Brno,**

Electron Microscopy of Cryo-Fixed Azotobacter vinelandii Encapsulated in Alginate Hydrogel: Effects of Crosslinking Agents

P-12 Piotr Jurkiewicz, BIOCEV, Faculty of Science, Charles University, Vestec
How Do Lipid Membranes Freeze? Cryogenic Fluorescence Lifetime Sensing of Membrane Structure

P-13 Aneta Křížová, CEITEC, Brno University of Technology, Brno
Diffraction Limits in Quantitative Phase Imaging

P-14 Petra Kubišová, Telight Brno s.r.o.
From Light to Life Through Quantitative Phase Imaging

P-15 Ajay Modi, Faculty of Medicine, Masaryk University, Brno,
Diffusion Kurtosis Imaging Detects Early Microstructural Changes in a Novel Intranasal Rotenone-Induced Parkinson's Disease Mouse Model

P-16 Pavla Molínová, Institute of Molecular Genetics of the Czech Academy of Sciences, Prague
IMG Electron Microscopy Core Facility

P-17 Jiří Navrátil, Faculty of Medicine, Masaryk University, Brno
BioSilk 3D Invasivity Assay: Caveolin-1 Influences Invasion of Prostate Cancer Cells

P-18 Kateřina Malínská, Institute of Experimental Botany of the Czech Academy of Sciences, Prague
Plant paparazzi - Multi-modal Light Microscopy of Plant Samples

P-19 Ivan Novotny, Institute of Molecular Genetics of the Czech Academy of Sciences, Prague
New Light Microscopy Technologies at IMG: Expanding Capabilities for Bioimaging Research

P-20 Dominik Pinkas, Institute of Molecular Genetics of the Czech Academy of Sciences, Prague
Solutions for preparation and visualization of vitrified biological samples at IMG Electron Microscopy Core Facility

P-21 Šárka Podlahová, Biology Centre of the Czech Academy of Sciences, České Budějovice
Comparative MicroCT Analysis of Silk Gland Morphology in Lepidopteran Caterpillars

P-22 Daniela Popelková, BIOCEV, Faculty of Science, Charles University, Vestec
Imaging Liver: From Regeneration to Pathology

P-23 Petra Prokšová, BIOCEV, Faculty of Science, Charles University, Vestec
Optical microscopy at Imaging Methods Core Facility BIOCEV

P-24 Lenka Rouhová, Biology Centre of the Czech Academy of Sciences, České Budějovice
Use of ultrastructural expansion microscopy to determine the number of cells in the corpora allata of Aedes aegypti

P-25 **Ivo Šauman, Biology Centre of the Czech Academy of Sciences, České Budějovice**
A Macroscope in the Microscopy Facility: To Be or Not to Be?

P-26 **Hana Sehadová, Biology Centre of the Czech Academy of Sciences, České Budějovice**
Introducing the Laboratory of Microscopy and Histology, Biology Centre CAS, the Czech-BioImaging research infrastructure observer

P-27 **Henrieta Škovierová, Biomedical Centre Martin, Jessenius Faculty of Medicine in Martin, Comenius University in Bratislava, Martin, Slovakia**
From Waste to Healing: Unlocking the Regenerative Ability of Extracted Teeth

P-28 **František Špoutil, Institute of Molecular Genetics of the Czech Academy of Sciences, Prague**
Preclinical in-vivo imaging at CCP

P-29 **Tereza Švestková, CEITEC, Masaryk University, Brno**
Evaluation of feature selection for classification of BOLD signal and artifacts in fMRI data

P-30 **Nikol Volfová, First Faculty of Medicine, Charles University, Prague**
Analysis of mitochondrial ultrastructure and morphology of mitochondrial cristae in relation to the type of mitochondrial dysfunction