

PRECLINICAL 9.4 T ADVENTURES

WORKSHOP

PROGRAM

9:00 – 10:40 Block I

Foreword by Preclinical 9.4 T Adventures organizers

Lipid-based Nanoparticles for Cancer Theranostics

Michaela Vojníková

Central European Institute of Technology Brno University of Technology, Brno, Czech Republic

Characterization of Ultra-High Frequency Oscillations Following Acute Intrahippocampal Administration of Kainic Acid in Mice

Petr Nejedlý

Institute of Scientific Instruments, Brno, Czech Academy of Sciences, Czech Republic

Label-free Light Microscopy in Animal Research

Daniel Hadraba

Institute of Physiology, Czech Academy of Sciences, Prague, Czech Republic

Two-photon Fluorescent Microscopy as a Tool to Study Early-stage Glioblastoma at the Cellular Level

Štěpán Kortus

Institute of Experimental Medicine, Czech Academy of Sciences, Prague, Czech Republic

Diffusion Kurtosis Imaging Detects Microstructural Changes in a Progressive Intranasal Rotenone Mouse Model of Parkinson's Disease

Amit Khairnar

International Clinical Research Center, St. Anne's University Hospital, Brno, Czech Republic

Department of Physiology, Faculty of Medicine, Masaryk University, Brno, Czech Republic

10:40 - 11:10 Coffee break

11:10 - 12:30 Block II

**How Gut Microbiota Affects Brain Changes in an Animal Model of Autism:
An NMR Study**

Petra Amchová

Department of Pharmacology, Faculty of Medicine, Masaryk University, Brno, Czech Republic

**1H MRS & MRI Study of a Maternal Depression Animal Model
and Antidepressant Therapy**

Marianna Maková

Institute of Physical Chemistry and Chemical Physics, Faculty of Chemical and Food Technology, Slovak
University of Technology in Bratislava, Slovak Republic

Preclinical 3R Introduction

Eva Dražanová

Institute of Scientific Instruments, Brno, Czech Academy of Sciences, Czech Republic

Department of Pharmacology, Faculty of Medicine, Masaryk University, Brno, Czech Republic

Specialization in Laboratory Animals

Harald Höger

Medical University of Vienna, Vienna, Austria

Czech Laboratory Animal Science Association

Jan Honetschläger

Institute of Molecular Genetics, Czech Academy of Sciences, Prague, Czech Republic

12:30 – 13:30 Lunch

13:30 - 15:00 Block III

**Preclinical MRI and Focused Ultrasound: Blood-brain Barrier Opening
and Thermal Manipulation**

Ondřej Macíček

Institute of Scientific Instruments, Brno, Czech Academy of Sciences, Czech Republic

1H MRS in Preclinical Research at ISI CAS

Iveta Haraštová

Institute of Scientific Instruments, Brno, Czech Academy of Sciences, Czech Republic

From Diffusion Anisotropy to Perfusion Anisotropy

Jiří Kratochvíla

Institute of Scientific Instruments, Brno, Czech Academy of Sciences, Czech Republic

Revealing Hidden Myocardial Pathologies in Preclinical Studies

Jiří Vitouš

Institute of Scientific Instruments, Brno, Czech Academy of Sciences, Czech Republic

Highlights and Educational Initiatives from Year 2024

Aneta Malá

Institute of Scientific Instruments, Brno, Czech Academy of Sciences, Czech Republic

15:00 – 15: 30 Coffee break

Tour de Facility

