

6. Wallachian Seminar

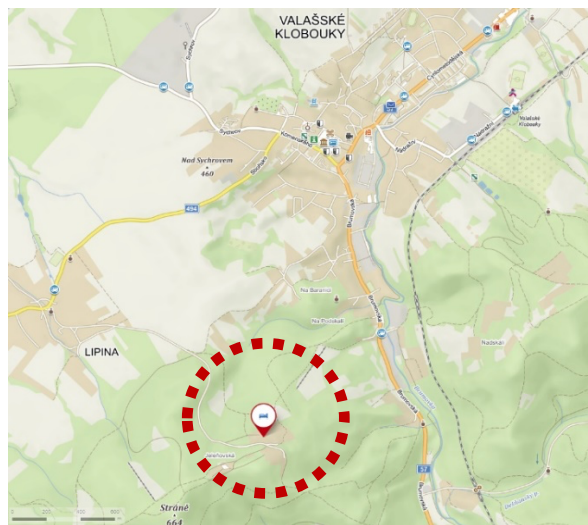
*Development of Molecular Probes for Magnetic Resonance and Optical
imaging:*

*“Multifunctional Nanoparticles in MRI Diagnostics
and Targeted Therapy”*

**May 25 - 27, 2026
Valašské Klobouky, Czech Republic**

Venue:

Horský hotel Jelenovská
Jelenovská 099, Valašské Klobouky
Česká republika
<https://www.jelenovska.com/>



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Monday, May 25, 2026

12:30 – 16:00 Arrival and Accommodation



Welcome COFFEE

16:00 – 18:15 Scientific session 1

Daniel Jiráček

Welcome and workshop scope

Shijia Teo - BRUKER presentation

Current developments in preclinical imaging

Matúš Miklovič + Matej Molnár

New animal model of myocardial infarction-induced heart failure with pulmonary hypertension

Dominika Valášková

Mapping the Brain: All-in-One Software for DWI Analysis

Wladyslaw Weglarz

Polymeric nanocarriers as a potential theranostic platform for neuroprotective treatment of ischemic stroke brain damage

18:30 Dinner

Tuesday, May 26, 2026

8:45 – 10:30 Scientific session 2

Daniel Jiráček

Short Introduction to the Jirak lab

Michal Franc

From Star Polymers to Statistical Copolymers: Diverse Platforms for ^{19}F and ^{11}B MRI

Filip Krupa

Organic Radical Contrast Agents (ORCA)

David Červený

Basic principle for rf MR coil design and construction. Application for bioreactor.

Aminadav Halili

Contrast Agents in MRI: What They Improve and What They Reveal

Sujin Park

Intravital microscopy in its wide range of applications



COFFEE BREAK

11:00 – 12:00 Scientific session 3

Karolina Siskova

Short introduction to the Siskova lab

Karolina Siskova

Contrasting proces based on bimetallic nanocomposites prepared by green chemistry approach

Hoang Yen Nguyenova

Bimetallic BSA nanocomposites in ionic environment

Radek Ostruszka

Cationization of BSA and optimization of the Fe–BSA–Au and Mn–BSA–Au system

12:00 – 13:00 Lunch

13:00 – 18:45 Labs' meetings, new project(s) discussion

19:00 Dinner

Wednesday, May 27, 2026

8:45 – 10:15 Scientific session 4

Ondrej Sedláček

Short Introduction to the Sedlacek lab

Ondřej Sedláček

Design of water-soluble fluoropolymers for ¹⁹F MRI

Vyshakh Panakkal

Synthesis of highly sensitive ¹⁹F MRI nanotracers by polymerization-induced self-assembly

Martin Orságh

Novel non metal contrast agent for ¹H MRI – SiGHT: Design and Synthesis

Dominik Havlíček

Novel non metal contrast agent for ¹H MRI – SiGHT: MR and fluorescence imaging



COFFEE BREAK

10:45 – 11:45 Scientific session 5

Richard Laga

Short Introduction to the Laga lab

Richard Laga

Design of biocompatible phosphonate-containing polymeric zwitterions for dual ³¹P/¹H MR imaging

Lucie Kracíková

Phosphoylids: A New Class of Phosphopolymers for Biomedical Imaging

Michal Pechar

Hydrophilic polymer conjugates with CoSANs for the targeted therapy and diagnosis of CA IX-positive malignant tumors

12:00 Lunch & Adjournment