

6th Mini-Symposium on the Blood-Brain Barrier from Basic to Clinical Research

PRELIMINARY SCIENTIFIC PROGRAM

March 19, 2024

9:20- 9:30 Opening Remarks

Andrej Kovac, Institute of Neuroimmunology SAS, Slovakia

9:30 – 10:40 PLENARY SESSION 1

(Chair: Andrej Kovac, Slovak Academy of Sciences, Slovak)

9:30- 10:00 **Anti-Amyloid Antibody (AAb) Binding to Amyloid Precursor Protein (APP) as a Mechanism for Amyloid Related Imaging Abnormalities (ARIAs)**

William A Banks, University of Washington, Seattle, USA

10:00- 10:20 **Regulation of claudin-5 at the blood brain barrier in health and disease**

Matthew Campbell, Trinity College, Dublin, Ireland

10:20-10:40 **Translational PET imaging of P-glycoprotein activity at the blood-brain barrier in health and disease**

Oliver Langer, Medical University of Vienna

10:40-11:00 Coffee Break

11:00 – 12:00 PLENARY SESSION 2

(Chair: Yoichi Morofuji, Nagasaki University, Japan)

11:00-11:20 **Synergistic induction of blood-brain barrier properties in culture models**

Maria Deli, Biological Research Centre, Szeged, Hungary

11:20-11:40 **Development of a novel organ-on-a-chip model combining a human cell-based culture model of the blood-brain barrier and human midbrain organoids**

Fruzsina Walter, Biological Research Centre, Szeged, Hungary

11:40-12:00 **Development of blood-cerebrospinal fluid barrier model expressing pharmaceutically important transporters**

Krutika Khiratkar, Institute of Neuroimmunology SAS, Slovakia

12:00-13:00 Lunch

13:00- 14:00 POSTER DISCUSSION

14:00- 15:10 PLENARY SESSION 3

(Chair: Maria Deli, Biological Research Centre, Szeged, Hungary)

14:00- 14:30 Penetration of Micro- and Nanoplastics Across the Blood-Brain Barrier: Unveiling the Influence of Biomolecular Coronas

Lukas Kenner, Medical University of Vienna

14:30-14:50 Tick-borne encephalitis virus at BBB and behind

Martin Palus, Veterinary Research Institute, Brno, Czechia

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- 14:50-15:10** **Drug delivery nanosystem to treat neuroinfections**
Mangesh Bhide, University of Veterinary Medicine and Pharmacy, Slovakia
- 15:10-15:30** **Nanoparticles decorated with targeting ligand combinations to cross the blood-brain barrier**
Szilvia Veszelka, Biological Research Centre, Szeged, Hungary
- 15:30-16:00** **Coffee Break**
- 16:00- 16:40** **PLENARY SESSION 4**
(Chair: Jozef Hanes, Institute of Neuroimmunology SAS, Slovakia)
- 16:00- 16:20** **Deciphering the mechanisms involved in the development of breast cancer brain metastases by combining in vitro and ex vivo approaches**
Caroline Mysiorek, University of Artois, Lens, France
- 16:20-16:40** **Deconvolution identifies cell type specific transcription patterns after loss of DNA methylation in the mouse brain**
Sabine Lagger, University of Veterinary Medicine, Vienna
- 16:40-17:00** **To be announced: Aloïse Mabondzo, Paris Saclay University, Paris, France**
- 17:00- 17:40** **PLENARY SESSION 5**
(Chair: Mangesh Bhide, University of Veterinary Medicine and Pharmacy, Slovakia)
- 17:00-17:20** **Accumulation of α -synuclein in the brain of mice with DSS-induced colitis**
Fuyuko Takata, Fukuoka University, Japan
- 17:00-17:40** **To be announced: Carola Foster, University of Würzburg, Würzburg, Germany**
- 17:40-18:00** **Concluding remarks**
- 19:00-22:00** **Dinner and Wine tasting**