BBB 2023 22. Barrier- and Transporter - Days Bad Herrenalb, May 15. - 17., 2023

Monday, May 15. 2023

18.00 p.m. Dinner

- 19.00-19.20p.m. Simon Drescher, Heidelberg, Germany The Phospholipid Research Center – An Introduction
- 19.²⁰-19.⁴⁰ p.m. Winfried Neuhaus, Vienna, Austria Nanoplastic effects on cells of the neurovascular unit

Subsequent get-together in the lounge and the garden of the Seminar Center

Tuesday, May 16., 2023

8.00-8.45 a.m. Breakfast

- 9.00- 9.20 a.m. Elena Puris, Heidelberg, Germany Altered protein expression of ABC and SLC transporters in familial Alzheimer's disease animal models
- 9.²⁰-9.⁴⁰ a.m. Mikko Gynther, Heidelberg, Germany Combating transporter-mediated anticancer drug resistance: new strategy against an old foe
- 9.40-10.00 a.m. Yohannes Hagos, Göttingen, Germany Species- and Substrate-dependent Inhibition of the renal Uptake Transporters OAT1 and OCT2 by Drugs and Pesticides

10.00-10.30 a.m. Coffee Break / Posters

- 10.30-10.50 a.m. Till Luckenbach, Leipzig, Germany ABC of cellular transporters in zebrafish embryos – relevance for toxicokinetics
- <u>10.⁵⁰-11.¹⁰ a.m. Lisa Gölz, Heidelberg, Germany</u> Potential endpoints to identify thyroid hormone system disruption in zebrafish embryos
- 11.¹⁰-11.³⁰ a.m. Ramya Puligilla, Basel, Switzerland Zebrafish larvae as an *in vivo* model to assess solvent-induced neurotoxicity.

11.30-11.50 a.m. Jeroen Bussmann, Leiden, NL Elucidating Lipid nanoparticle behavior using zebrafish

12.00-13.30 p.m. Lunch

- 13.30-13.50 p.m. Kai-Uwe-Goss, Leipzig, Germany New insights into the intrinsic permeability of organic chemicals through biological membranes I
- 13.⁵⁰-14.¹⁰ p.m. Carolin Dahley, Leipzig, Germany New insights into the intrinsic permeability of organic chemicals through biological membranes II
- 14. 10-14. 30 p.m. Amira Hanafy, Bonn, Germany ISMICAP: a model for delving into blood-brain barrier mysteries
- <u>14.30-14.50 p.m. Sven M. Stefan, Oslo, Norway</u> Molecular-structural Basis for Target Repurposing Strategies to Explore Orphan Transporters and Modesof-action

14.50 - 15.20 p.m. Coffee Break / Posters

- 15.²⁰-15.⁴⁰ p.m. Matthias Barz, Leiden, Netherlands Alternatives to PEGylated Lipids: Stealth Lipids based on Endogenous Amino Acids and their impact on Liposomes, Lipoplexes and LNPs
- <u>15.40-</u> <u>16.00</u> p.m. Victoria Klang, Vienna, Austria Phospholipid-based dermal formulations: biocompatibility in vitro and effect on skin physiology
- 16.00- 16.20 p.m. Yulia Yuts, Zurich, Switzerland Poly(aminoester) based inks for 3D printing of elastic, strong and biodegradable biomedical devices
- <u>16.20-</u> 16.50 p.m. Christian Nehls, Borstel, Germany Liposomes as bottom-up cell model systems for standardized compound testing in microfluidic setups
- 16.⁵⁰- 17.¹⁰ p.m. Lien Sabrina Reichel, Jena, Germany Polyplex particles: Hydrophobic components facilitate membrane crossing and promote gene transfer of cationic polymers.
- 18.00 p.m. Dinner Subsequent get-together in the lounge and the garden of the Seminar Center

Wednesday, May 17., 2023

8.00-9.00 a.m. Breakfast

- 9.00-9.20 a.m. Christina Fey, Würzburg, Germany Intestinal tissue models representing the in vivo situation to a high degree
- 9.²⁰-9.⁴⁰ a.m. Andreas Mack, Tübingen, Germany Aquaporins in Postmortem Tissue and Cell Culture of the Human Choroid Plexus
- 9.40-10.00 a.m. Franz Hagn, Munich, Germany Structural basis of metabolite transport by the chloroplast outer envelope channel OEP21
- 10.00-10.20 a.m. Markus Glaser, Würzburg, Germany Investigation of mitochondrial function in neurovascular cell models of PARK2 copy number variation carriers with adult ADHD

10.20-1050 a.m. Coffee Break / Posters

- 10.50-11.10 a.m. Pat Muschong, Ludwigshafen, Germany Improvements of workflows and assay reproducibility by "assay-ready" culturing of MDCK cells for transport studies
- 11.¹⁰-11.³⁰ a.m. Karin Danz, Sulzbach, Germany Disease-specific, hiPS-based blood-brain barrier modelling for pharmaceutical applications
- 11.³⁰-11.⁵⁰ a.m. Mohammed Rafehi, Göttingen, Germany Drug repurposing strategies and network polypharmacology to identify transporter modulators and overcome therapy failure
- 11.⁵⁰-12.¹⁰ a.m. Tamas Varga, Budapest, Hungary The inhibitor preincubation effect is universal to SLC transporter assays and is only partially eliminated in the presence of extracellular protein

12.15 p.m. Lunch

End of the Meeting