

Brain and Technology

Date:

Thursday, 27 June 2024, 13:30-19:00

Friday, 28 June 2024, 8:30-15:00

Organizer:

- Univ. Prof. Dr. Raimund Helbok, Head of the Dept. of Neurology, Clinical Research Institute for Neurosciences; Johannes Kepler University Linz, Faculty of Medicine, Linz, Austria
- Univ. Prof. Dr. Andreas Gruber, Head of the Dept. of Neurosurgery, Clinical Research Institute for Neurosciences; Johannes Kepler University Linz, Faculty of Medicine, Linz, Austria
- Ass. Prof. Martin Fabricius, D.M.Sc., Head of EEG-section; Department of Clinical Neurophysiology, Rigshospitalet, University of Copenhagen, Denmark

Secretary:

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Location:

ADM Building, 9th Floor

MED Campus I

Johannes Kepler University

Krankenhausstraße 5

4020 Linz

Participants:

Researchers, medical doctors, residents, students.

Participation:



Registration until Wednesday the 19th of June 2024 (mandatory)

Thursday, 27th June 2024

13:30: Welcome

Mag.^a Dr.ⁱⁿ Elgin Drda, Vice Rector for Medicine, Dean of the Faculty of Medicine

Prof. Dr. Raimund Helbok, Head of the Department of Neurology, Co-Chair of the CRI

13:40-14:40: Neuroanatomy and Neurosurgery (A. Gruber & T.R. Meling)

13:40-13:55: The Danish Brain- and Technology- Clinical Academic Group (Martin Ballegaard)

14:00-14:15: Neurosurgeon: 3D technique for aneurysmal surgery (Andreas Gruber)

14:20-14:35: Blister aneurysms: challenges and treatment options (Torstein R. Meling)

14:40-15:00: Break

15:00-16:35: Spreading Depolarization (SD) and Epilepsia (M. Fabricius & R. Helbok)

15:00-15:12: SD-basic and historical (Martin Fabricius)

15:20-15:32 Clinical research and SD including brain edema (Raimund Helbok)

15:40-15:52: KETA-BID protocol and preliminary results (Trine Hjørlev Andreasen)

16:00-16:12: Seizure prediction & the EPILEPSIA project (Gudrun Gröppel)

16:20-16:30: Microglia phenotyping and seizure risk in patients with glioblastoma (Vincent Böhm)

16:35-17:00: Break

17:00-18:30: Multimodal neuromonitoring and neurophysiology (K. Møller & M. Engelhardt)

17:00-17:12: Microdialysis and micro-RNA at NIU, Rigahospitalet (Kirsten Møller)

17:20-17:32: (Sub)cellular basis of SD in brain slices - perspectives (Maren Engelhardt)

17:40-17:52: SDs and the role of microglia (Anna Tröscher-Böhm)

18:00-18:10: SD in the rat: Changes in basal CMRO₂ and CBF (Henning Pilgaard Hansen)

19:30: Faculty Dinner

Friday, 28th June 2024

8:30-9:50: Data-analysis (M. Ballegaard & R. Helbok)

8:30-8:42: Machine learning for multimodal neurophysiological data (Tobias Andersen)

8:50-9:02: Big data analysis: is clustering analysis a solution? (Jeanette Tas)

9:10-9:25: Digitization and project optimization (Kabir Humayaun)

9:30-9:45: Non-invasive EEG-recording of spreading depolarizations (Martin Fabricius)

9:50-10:20: Break

10:20-11:40: Neuromonitoring and Rehabilitation (K. Møller & R. Helbok)

10:20-10:35: Implementation of Multimodal neuromonitoring in the ICU (Jeanette Tas)

10:40-10:55: What can we learn from multimodal neuromonitoring in the ICU? (Raimund Helbok)

11:00-11:15: Neurorehabilitation – Exploring the living lab approach (Christina Kruuse)

11:20-11:35: The ESSENCE study: Functional EEG connectivity analySiS in patients with acute brain injury (Raimund Helbok)

11:50-12:45: Lunch

12:45-15:00: Discussion of future collaboration. (Department of Neurology, MCIII, Ground Floor, Conference Room)

15:00: End