Mouse as a model in neuroscience research

Basic concepts and disease modelling

November 28th and 29th 2018 at Kontinkangas Campus

Course overview: The course offers basic knowledge on brain anatomy and development, and gives an update of latest research findings and methods in the field. The translational aspects from mouse model-derived data to human disease are also considered. The course is aimed for students and researchers in medicine, biochemistry and molecular medicine, biology and other relevant fields. The lectures are open for all interested.

Study credits: Participation in lectures 0.5 ECT and additional 0.5 ECT for poster.

Registration: https://www.webropolssurveys.com/S/D946C30E9BF4525B.par

Coffee and snacks are served for registered participants. Registration open until 16.11.2018.
Course programme

Day 1, Wed 28th, H1091, Dentopolis

9:00-9:15 Welcome

Session 1: Mouse brain anatomy and development
9:15-10:00 Development of mouse cerebral cortex
Mikko Airavaara, University of Helsinki
10:00-10:30 Coffee
10:30-11:15 Towards understanding the brainstem - one cell at a time
Juha Partanen, University of Helsinki
11:15-12:00 Dissecting the cellular and molecular mechanisms driving cerebellar development
Parthiv Haldipur, University of Washington, USA
12:00-13:00 Lunch break

Session 2: Glymphatic system and blood-brain-barrier
13:00-13:45 The glymphatic clearance system of the brain
Iben Lundgaard, Lund University, Sweden
13:45-14:30 Multimodal human glymphatic research in Oulu
Vesa Kiviniemi, University of Oulu
14:30-15:00 Coffee
15:00-15:45 Recruitment of the meningeal lymphatics by the blood-brain barrier
Oxana Semyachkina-Glushkovskaya, Saratov State University, Russia

Day 2, Thu 29th, 338B, Kieppi

Session 3: Mouse as a disease model
9:15-10:00 Challenges in modeling human brain disorders with genetically modified mice - Alzheimer's disease as an example
Heikki Tanila, University of Eastern Finland
10:00-10:45 Modeling neuroinflammation in mice
Tarja Malm, University of Eastern Finland
10:45-11:45 Lunch break
11:45-12:30 The developing cortex and associated malformations
Fiona Francis, École des Neurosciences de Paris Île-de-France, France
12:30-13:00 What have we learned? Interactive Quizz!
Bring your own mobile device or laptop

Session 4: Posters & Snacks
13:00-15:00 Kieppi main hall

More information:
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