Croatian Science Foundation Research project Uniqueness in the development of interneurons in the human prefrontal cortex during fetal life and first postnatal year – implications in the pathogenesis of schizophrenia and autism (IP-2022-10-8493)

> WORKSHOP and MINI-SYMPOSIUM Wednesday, December 4th, 2024. University of Zagreb School of Medicine Croatian Institute for Brain Research



10:30-13.30 Workshop (Brain bank)

Preparing human tissue for single-nucleus RNA sequencing (Konstantin Khodosevich) Immunohistochemistry and RNAscope in situ hybridization on developing monkey and human brain (Monique Esclapez, Zdravko Petanjek)

> 15:00-18.00 Mini-symposium (Seminar room 1 – ground floor) Invited lectures

Developmental mechanisms in schizophrenia (Konstantin Khodosevich, Biotech Research & Innovation Centre, University of Copenhagen, Denmark) https://www.bric.ku.dk/research-groups/Research/khodosevich-group/

Developmental timeline of the emergence of GABAergic perisomatic innervation in hippocampus of mice, human and non-human primates (Agnes Baude and Monique Esclapez, Aix Marseille, University, Inserm, INMED, Turing Center for Living Systems, Marseille, France.) https://www.researchgate.net/scientific-contributions/Agnes-Baude-39482962 https://research.com/u/monique-esclapez

Projects overview

Uniqueness of organization and development of cortical GABA-ergic neurons in the primate cerebral cortex (Zdravko Petanjek and Monique Esclapez)

Proliferative Zones of the Medial Telencephalic Wall in Primates as a Source of GABAergic Neurons During Late Gestation and Early Postnatal Period (Marina Čavka and Ana Hladnik)

Molecular and structural features of infant and adult human neocortical layer I (Maura Zanze Beader and Zdravko Petanjek)

Brain tumors and disrupted interneuron development (Joško Bilandžić)

A novel approach to cytoarchitectonics: developing an objective framework for the morphological analysis of the cerebral cortex (Matija Vid Prkačin and Ivan Banovac)

Morphological and molecular characteristics of perineuronal nets in the human prefrontal cortex - a possible link to microcircuitry specialization (Ivan Banovac and Nataša Jovanov Milošević)

Thursday, December 5th, 2024, 14:30 Invited lecture

The lateral Supramammillary nucleus (SuML) -Dentate Gyrus (DG) pathway contributes to the Epileptogenic Network In Mesial Temporal Lobe Epilepsies (Monique Esclapez)