

Regenerative Pharmacology (session 3/4)

Date: Tuesday, October 6th

Time: 04:00 pm – 04:45 pm (CEST)

Location: Zoom Video Conferencing

Registration: Required

Organizing partners: NVF & UIPS

Program:

04:00 pm – 04:45 pm **Human Cellular Models for Hypoxic Brain Injury of Prematurity**

Dr. Anca Pasca, Assistant Professor of Pediatrics,
Neonatology at Stanford University

Abstract:

Prematurity is the leading cause of neuropsychiatric disabilities in children. Gray matter and white matter injury (WMI) are commonly identified on postmortem studies of premature infants and associated with substantial motor and cognitive impairments. Hypoxic events due to lung immaturity contribute to the pathophysiology of brain injury of prematurity.

Despite important life-long consequences, the exact cellular defects and molecular mechanisms of damage in hypoxic brain injury of prematurity remain unclear in humans. As results, efficient therapies are lacking.

To study alterations induced by hypoxia in the developing human forebrain and white matter, we are developing human cellular models derived from induced pluripotent stem cells to study cell type specific defects and cell-cell interactions under hypoxic stress. It is our hope that insights gained using these models will identify molecular pathways that could be targeted for development of therapeutic interventions.

Organizing Partners:

