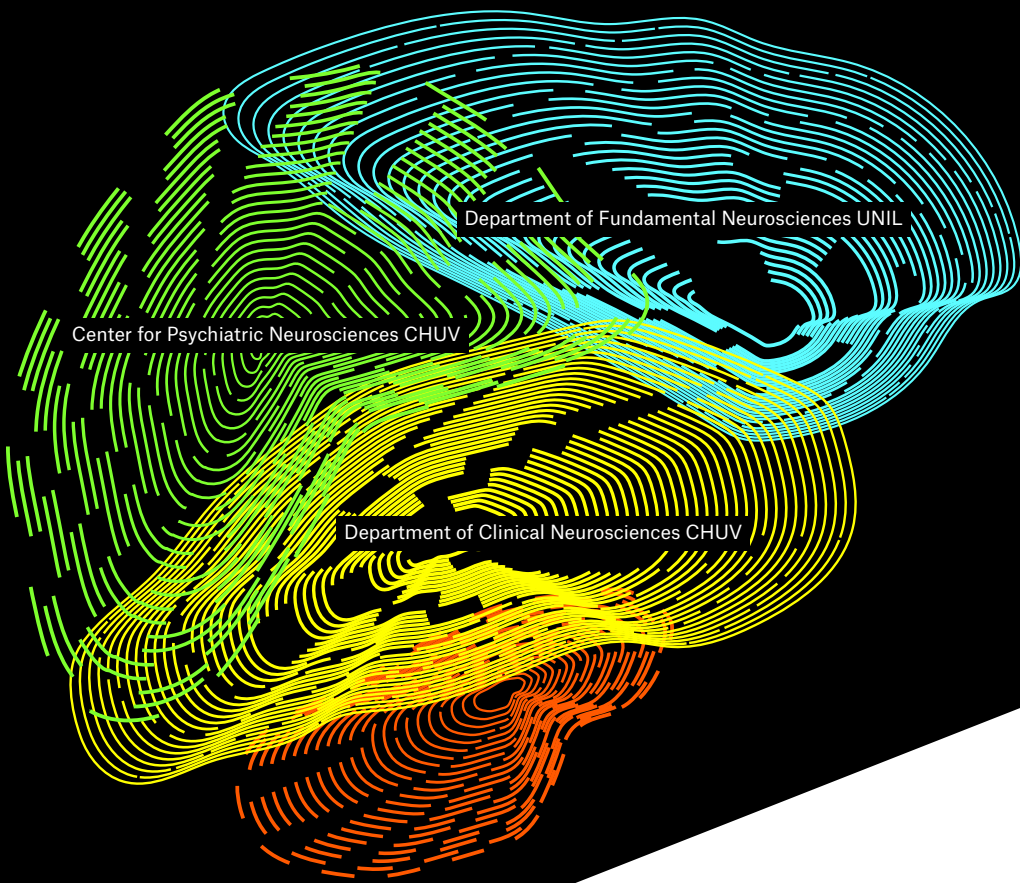


1st Stem Cells and Brain Organoids Training Course and Symposium



Department of Fundamental Neurosciences UNIL

Center for Psychiatric Neurosciences CHUV

Department of Clinical Neurosciences CHUV

4th of April 2019

Venue:
Centre Hospitalier
Universitaire Vaudois (CHUV)
Auditoire Jequier-Doge
PMU level 8
Rue du Bugnon 19
1011 Lausanne

The advent of induced pluripotent stem (iPS) cells provides access to virtually limitless cells of any type, through a simple skin biopsy or blood sample.

Upon neuronal differentiation and growth in 3D matrix, these cells form organoids, which enable the study of brain development and diseases in vitro starting from patients' cells, thereby helping in bridging the gap between clinical and fundamental neuroscience.

For this first symposium, we have invited leaders in this field, who have considerably contributed to our understanding of human brain functions and dysfunctions through an outstanding research on stem cells.

This symposium will be preceded by the "Stem cells in Neuroscience" training course for the Lemanic Neuroscience Doctoral School.

No registration is required.

08:15-08:30 **OPENING REMARKS**

08:30-9:15 **DE HUMANI CORPORIS FABRICA: ORGANOID-BASED DECONVOLUTION OF NEUROPSYCHIATRIC DISORDERS AT SINGLE CELL RESOLUTION**

Giuseppe Testa | University of Milan, Laboratory of Stem Cell Epigenetics, Italy

09:15-10:00 **MODELING RARE AND COMMON RISK FACTORS FOR SCHIZOPHRENIA USING STEM CELLS**

Kristen Brennand | New York Stem Cell Foundation-Robertson Investigator, USA

COFFEE BREAK

10:30-11:15 **USING STEM CELL MODELS TO STUDY BIPOLAR DISORDERS**

Maria Marchetto | Salk institute, USA

11:15-12:00 **ACTIVE NEURONAL INTERFACING: CARBON BASED NANOMATERIALS FOR STIMULATING, REPLACING AND RE-DIRECTING AXON GROWTH**

Laura Ballerini | International School for Advanced Studies, Trieste, Italy

LUNCH

14:00-14:45 **DECIPHERING THE ROLE OF GLIA IN NEURODEGENERATIVE DISEASES USING PATIENTS IPSCS**

Valentina Fossati | The New York Stem Cell Foundation, USA

14:45-15:10 **TEMPORAL FATE PLASTICITY IN NEOCORTICAL PROGENITORS**

Denis Jabaudon | University of Geneva

15:10-15:35 **HUMAN INDUCED PLURIPOTENT STEM CELL-DERIVED ASTROCYTES ARE DIFFERENTIALLY ACTIVATED BY MULTIPLE SCLEROSIS-ASSOCIATED CYTOKINES**

Sylvain Perriot | Neurology, University Hospital of Lausanne

COFFEE BREAK

16:05-16:30 **REPRODUCIBLE IPSC-DERIVED BRAIN 3D MODEL TO STUDY OLIGODENDROCYTE AND MYELIN**

David Pamies | Department of Physiology, University of Lausanne

16:30-16:55 **RETINAL CELLS DERIVED FROM IPSC TO TEST GENE TRANSFER AND DRUG ADMINISTRATION**

Yvan arsenijevic | Ophthalmic Hospital, University Hospital of Lausanne

16:55-17:20 **GENERATION OF HYPOTHALAMIC OREXIN AND MCH NEURONS FROM MOUSE IPSCS**

Ali Seifinejad | Department of Physiology, University of Lausanne

17:20-17:45 **DEVELOPMENTAL TRAJECTORY OF FRAGILE-X SYNDROME IPSCS**

Giulia Cencelli | Department of Fundamental Neurosciences, University of Lausanne & Department of Biomedicine and Prevention, University of Rome Tor Vergata

17.45 **CLOSING REMARKS AND APERO**

Organisers

Nicole Déglon

Neuroscience Research Center, CHUV, Lausanne

Renaud Du Pasquier

Department of Clinical Neurosciences, CHUV, Lausanne

Kim Q. Do

Center for Psychiatric Neuroscience, CHUV, Lausanne

Claudia Bagni

Department of Fundamental Neurosciences, UNIL, Lausanne

Contact

The meeting will take place at:

Centre Hospitalier Universitaire Vaudois (CHUV)

Auditorium Jequier-Doge

PMU level 8

Rue du Bugnon 19

1011 Lausanne

Additional information

info.crn@chuv.ch

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