



Workshop “Mechanisms, Therapies and Biomarkers in Neurodevelopmental Disorders”

May 21, 2022

Scuola Normale Superiore Pisa,
Scientific Program

Azzurra room, Palazzo della Carovana

9-9.10 Tommaso Pizzorusso (Scuola Normale Superiore and Institute of Neuroscience CNR)

Welcome

Session 1 (Chair: Laura Mamounas, NIH)

9.10-9.40 Peter Tsai (UT SouthWestern)

Cerebellar regulated circuits in autism-relevant behaviors

9.40-10.10 Michela Fagiolini (Boston Children’s hospital)

Circuit dissection in rare neurodevelopmental disorders

10.10-10.40 Paola Tognini (University of Pisa and Scuola Normale Superiore)

Role of the gut-microbiota-brain axis in neurodevelopmental plasticity

Coffee break

Session 2 (Chair: Yuri Bozzi, University of Trento)

10.55-11.45 Claudia Bagni (University of Lausanne and University of Rome Tor Vergata)

Hyperactive mitochondria cause social behavioral deficits (keynote lecture)

11.45-12.15 Barbara Bardoni (CNRS UMR7275 and Université Côte d’Azur)

New insights into the pathophysiology of Fragile X Syndrome: altered molecular and cellular phenotypes

12.15-12.45 Zhaolan “Joe” Zhou (University of Pennsylvania)

Allelic Insights into the Pathophysiology and Therapeutic Strategies for Neurodevelopmental Disorders

Lunch and poster session in the cloister

Session 3 (Chair: Maurizio Giustetto, University of Turin)

14.45-15.15 David Hampson (University of Toronto)

The Successes and the Challenges of Developing Viral Vector-Mediated Gene Therapy for Fragile X Syndrome and Dravet Syndrome

15.15-15.45 Laura Baroncelli (Institute of Neuroscience CNR)

Creatine Transporter Deficiency: the long journey to successful therapy

15.45-16.15 Alessandro Gozzi (Italian Institute of Technology, Rovereto)

Decoding autism connectopathy with cross-species fMRI

Coffee break

Session 4 (Chair: Tommaso Pizzorusso, Scuola Normale Superiore and

Institute Neuroscience CNR)

16.30-17.20 Michela Matteoli (Institute of Neuroscience CNR and Humanitas University)

How the immune system affects synaptic function (keynote lecture)

17.20-17.50 Nicola Allen (Salk Institute)

Aberrant astrocyte protein secretion contributes to altered neuronal development in diverse disorders

17.50-18.20 Antonino Cattaneo (Scuola Normale Superiore)

Functional subcellular proteomics and learning-related cartography of potentiated dendritic spines in physiology and pathology