

Mechanistic Insights into Neurological Disorders and New Therapeutic Strategies

Conference

Rome, July 7th – 8th, 2021

CNR Headquarters - Aula Convegni

Piazzale Aldo Moro, 7

Info: segreteria.dsb@cnr.it – (+39) 06 4993 3714



Acknowledgments

DSB Organizing Committee

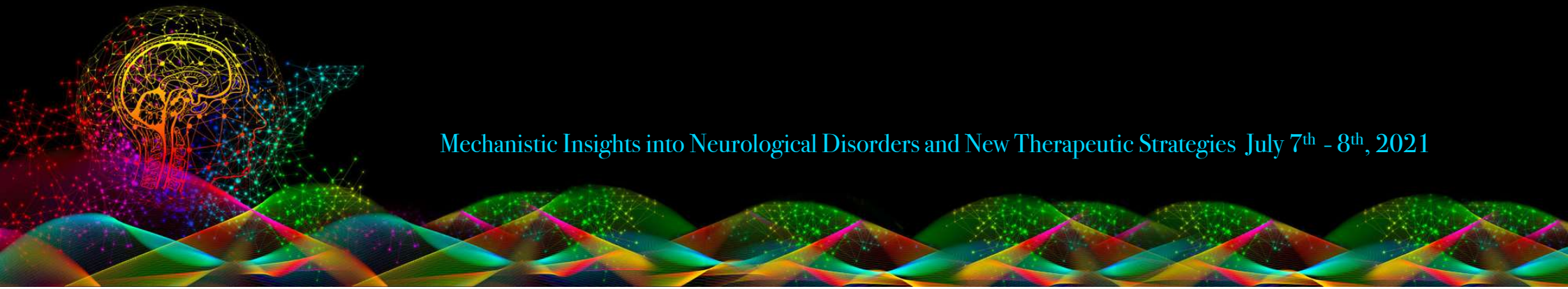
Tiziana Borghini
Claudio Cesarino
Diomira Di Ciano
Elsa Fortuna
Andreina Fullone
Arianna Moretti
Raffaella Rubeo

Scientific Committee

Piergiuseppe De Berardinis, DSB Scientific Council
Alessandro Giuffré, IBPM Director
Giovanni Maga, IGM Director
Antonio Simeone, IGB Director
Maria Patrizia Stoppelli, DSB Scientific Council
Luigi Zecca, DSB Scientific Council

Technical Committee

Mirko Passera, IFC - Multimedia Group
Elisabetta Pisano, IFC - Communication Office
Luca Serasini, IFC - Multimedia Group
Daniela Stalteri, DSB - IT coordinator



Mechanistic Insights into Neurological Disorders and New Therapeutic Strategies July 7th - 8th, 2021

Program – Wednesday July 7th, 2021

11.30 - 11.45 Welcome address - Daniela Corda, DSB Director

Session: Neurodevelopment - Chair: Alessandro Giuffrè, Patrizia Lavia

11.45 - 12.00 CENP-F, a mitotic kinetochore protein implicated in microcephaly - P. Lavia, IBPM

12.00 - 12.15 The crystal structure of KCTD1 redefines the evolutionary connections among KCTD proteins - L. Vitagliano, IBB

12.15 - 12.30 Identification of druggable molecular pathways damaged in X-linked neurodevelopmental disorders - M. G. Miano, IGB

12.30 - 12.45 Developmental impaired Akt signaling in the Shank1 and Shank3 double knock-out mice – C. Verpelli, IN

12.45 - 13.00 Rescuing epileptic phenotype and behavioral alterations in a Dravet syndrome mouse model by inhibiting eukaryotic elongation factor 2 kinase (eEF2K) - C. Sala, IN

13.00 - 13.15 Fragile X Syndrome: neurobiology and therapeutic perspectives - M. V. Catania, IRIB

13.15 - 13.30 Restoration of Scn1a expression after symptom onset in a novel model of Dravet syndrome rescues seizures and behavioral alterations - S. Brusco, IN

13.30 - 14.30 **Lunch**

14.30 - 14.45 GABA tonic conductance is altered early during development in a mouse model of Dravet syndrome – G. Losi, IN

14.45 - 15.00 Lateral habenula dysfunctions in Tm4sf2 -/y mice model for neurodevelopmental disorder – L. Murru, IN

Session: Neuromuscular and Psychiatric Diseases - Chair: Giovanni Maga, Giancarlo Colombo

15.00 - 15.15 The mechanosignaling network of differentiating myoblasts under mechanical strain - G. Lattanzi, IGM

15.15 - 15.30 Epigenetic reprogramming of Fibro-Adipogenic Progenitors promotes repair and prevents degeneration of dystrophic muscles - V. Bianconi, IBPM

15.30 - 15.45 Celf2a inhibition: a new strategy to ameliorate Duchenne Muscular Dystrophy symptoms – J. Martone, IBPM

15.45 - 16.00 Brain circuits of fear attenuation - B. Silva, IN

16.00 - 16.15 Clinical, genetic and epigenetic correlates in child abuse - X. G. Pappalardo, IRIB

16.15 - 16.45 **Coffee break**

Session: Infrastructures - Chair: Piergiuseppe De Berardinis, Maria Patrizia Stoppelli

16.45 - 17.00 Gene therapy strategies for myotonic dystrophy type 1 - S. Mandillo, IBBC

17.00 - 17.15 Exploring the neuroprotective effects of Montelukast treatment in a rat model of quinolinic acid-induced neurotoxicity - S. Belloli, IBFM

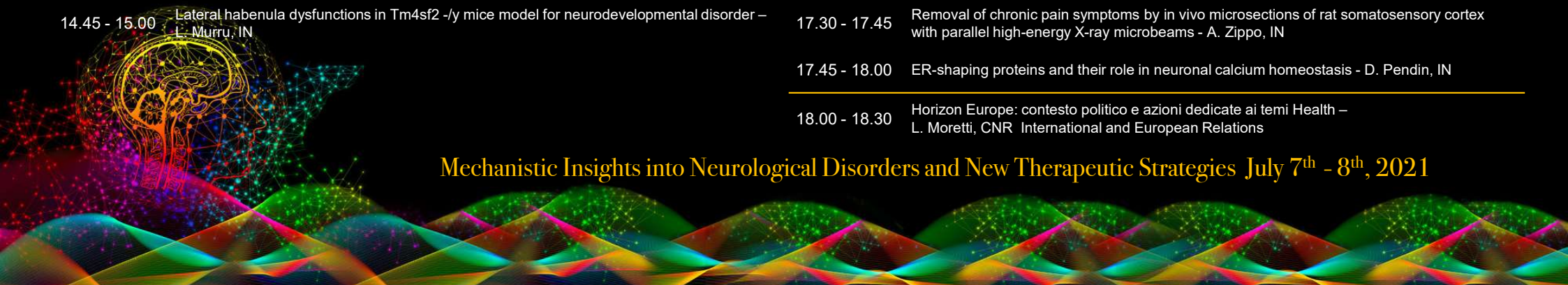
17.15 - 17.30 Networking-based prediction of involvement of differentially expressed lncRNAs in Alzheimer's Disease - E. Filomena, IBIOM

17.30 - 17.45 Removal of chronic pain symptoms by in vivo microsections of rat somatosensory cortex with parallel high-energy X-ray microbeams - A. Zippo, IN

17.45 - 18.00 ER-shaping proteins and their role in neuronal calcium homeostasis - D. Pendin, IN

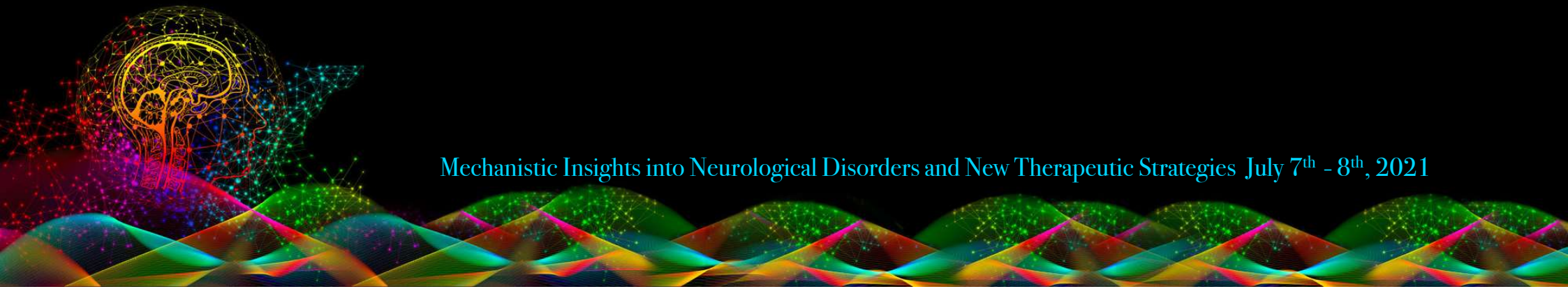
18.00 - 18.30 Horizon Europe: contesto politico e azioni dedicate ai temi Health – L. Moretti, CNR International and European Relations

Mechanistic Insights into Neurological Disorders and New Therapeutic Strategies July 7th - 8th, 2021



Program – Thursday July 8th, 2021

	Welcome address – Maria Chiara Carrozza, CNR President	11.45 - 12.00	Targeting the Wnt/ β -catenin pathway by Natriuretic Peptides: an attractive therapeutic approach for Parkinson's disease - A. Serafino, IFT
09.00 - 10.00	Lecture "Empowering stem cell therapy for huntington's disease using single-cell genomics" - Elena Cattaneo, Università degli Studi di Milano	12.00 - 12.15	Dissecting olfactory circuits'alterations in mouse models of Parkinson's disease - C. Lodovichi, IN
	Session: Neurodegeneration - Chair: Gianluca De Bellis, Luigi Zecca	12.15 - 12.30	Sigma-1receptor mutation causes dysregulation of cell homeostasis and intracellular CA ²⁺ signaling in dhmn patient cells - G. Pallafacchina, IN
10.00 - 10.15	Intracellular interference with A-beta oligomers rescues adult hippocampal neurogenesis and memory deficit of Tg2576 - R. Scardigli, IFT	12.30 - 12.45	Drosophila melanogaster models in neurologic and neurodegenerative diseases - F. Cipressa, IBPM
10.15 - 10.30	Pathogenic fus promotes the expression of aggregation-prone splicing isoforms of hnrnpa2b1 in amyotrophic lateral sclerosis - M. Cozzolino, IFT	12.45 - 13.00	Deciphering the neuroprotective role of Sigma1 Receptor, an important function to overcome the symptoms of neurodegenerative disorders - V. Morea, IBPM
10.30 - 10.45	Structural evidences for the role of CD33 SNP rs2455069 in Alzheimer disease progression - E. Vitale, IBBC	13.00 - 13.15	ALS-linked cytoplasmic inclusions alter DNA-Damage Response activation - S. Francia, IGM
10.45 - 11.00	Nuclear Tau modulates gene expression leading to glutamate release alterations during AD progression - G. Siano, IN	13.15 - 13.30	Identification of sixteen novel candidate genes for late onset Parkinson's disease: polygenic variants load and Parkinson's disease risk - T. Esposito, IGB
11.00 - 11.30	Coffee break	13.30 - 13.45	Altered insulin pathway induces mitochondrial dysfunction and impairs autophagy in in vitro and in vivo model systems - M. Di Carlo, IRIB
11.30 - 11.45	Microglia-specific overexpression of alpha-Synuclein leads to severe dopaminergic neurodegeneration by phagocytic exhaustion and oxidative toxicity - V. Broccoli, IN	13.45 - 14.00	Bioengineering approaches to investigate CLN8-VAPA interaction in CLN8-diseases - P. Guarneri, IRIB



Mechanistic Insights into Neurological Disorders and New Therapeutic Strategies July 7th - 8th, 2021