





# National Center for Gene Therapy and Drugs based on RNA Technology

## Spoke 3

# Schedule Meeting 5th-07th October 2025

## RNA-based innovative therapies for neurological disorders

# Day 15th of October

17.00-17.15 Welcome Gustincich - IIT

17.15 – 17.30 Welcome Rizzuto – CN3, UniPD

## Theme 1: RNA Metabolism and therapeutics (Chairs Gustincich Oliviero)

# 17.30-18.30 Plenary Lecture

#### Prof. Adrian R. Krainer

St. Giles Foundation Professor Cancer Center Program Co-Leader Cold Spring Harbor Laboratory USA

18.30 – 19.30 Poster Session (sala Colonna)

19.30 Apericena Buffet

# Day 2 6th of October

9.00 – 9.20 Prof. Oliviero Salvatore. – UniTO

"Non-coding RNAs in Brain Developmental Diseases"

9.20 – 9.40 Dr. De Pietri Tonelli Davide – IIT

"piRNA Pathway Functions in the Aging Brain: From Synaptic Plasticity to Neuroinflammation"

9.40 – 10.00 Prof. Tartaglia Gian Gaetano- IIT

"Breaking Boundaries in Biotechnology: Designing RNA molecules for Diagnostics and Therapeutics"

10.00 – 10.20 Dr. Siciliano Velia. – IIT

"RNA-based Bioengineering Approaches to Therapy"



10.20 - 11.00 Coffee break

#### Theme 2: Neurodev (Chairs Bonora Cancedda)

11.00 - 11.20 Prof. Presutti Carlo- UniROMA1

To be determined.

11.20 – 11.40 Dr. Barberis Andrea – IIT

"SINEUPs for the Treatment of Genetic Epilepsies Linked to Impaired GABAergic Inhibition"

11.40 – 12.00 Prof. Gustincich Stefano. – IIT

"multiSINEUPs for the Treatment of 22q11.2 deletion syndrome"

12.00 – 12.20 Dr. Cancedda Laura – IIT

"NKCC1 miRNA Gene Therapy as a Potential Treatment for Normal Pressure Hydrocephalus"

#### 12.20 - 12.50 Invited Speaker

#### Prof. Gaia Novarino

Executive Vice President, Institute of Science and Technology Austria (ISTA)

Vienna

Austria

"From Molecular Programs to Neural Systems: Navigating the Complex Landscape of Autism Spectrum"

12.50 – 14.00 Buffet Lunch + poster session

#### Theme 3: AD/PD/ALS (Chairs Antonini Frigeri)

14.00 – 14.20 Prof. Rosa Alessandro - UniROMA1

"The RNA-binding Protein ELAVL4/HuD: from Basic Molecular Mechanisms to a New Possible Target in ALS"

14.20 - 14.40 Prof. Ballarino Monica - UniROMA1

To be determined.

14.40 – 15.00 Prof. Denti Michela – UniTN

"Therapeutic Modulation of RNA Splicing for the Treatment of 4R Tauopathies"

15.00 – 15.20 Prof. Antonini Angelo- UniPD

"Clinical, Biological and Genetic Characterization of the PADUA-CESNE Cohort"







## 15.20 - 15.50 Invited Speaker

#### Prof. Piero Fratta

Professor of Cellular and Molecular Neuroscience Department of Neuromuscular Diseases University College London London, UK

15.50 - 16.30 Coffee break

# Theme 4: Expanded repeats (Chairs Poletti Provenzani)

16.30 – 16.50 Prof. Poletti Angelo – UniMI

"Targeting Expanded Repeat-Derived Toxic Proteins: Emerging Interventions for Motor Neuron Disorders"

16.50 – 17.00 Prof. Corti Stefania– UniMI

"Therapeutic Targeting of C9ORF72-G4C2 Repeats: An Innovative Approach to Mitigate Neurotoxicity in ALS/FTD"

17.00 – 17.20 Prof. Biagioli Marta – UniTN

"The Conserved *circHTT(2,3,4,5,6)* in Huntington's Disease: From Pathological Insight to Therapeutic Innovation"

17.20 – 17.40 Prof. Martello Graziano- UniPD

"Testing the Therapeutic Potential of MTF1 Gene Delivery in Human *in vitro* Models of Huntington's Disease"

17.40 – 18.00 Dr. Maglione Vittorio - NEUROMED

"Nanoparticle-mediated Delivery of Therapeutic RNA in Pre-clinical Models of Neurodegenerative Diseases"

#### 18.00 - 18.30 Invited Speaker

### Prof. Davide Trotti - Jefferson University, USA

Professor | Dept. of Neuroscience Thomas Jefferson University Director of Research | Weinberg ALS Center Vickie and Jack Farber Institute for Neuroscience

"Genome Instability and Innate Immune Stress Response in Neurodegeneration"







18.30 - 20.0 Poster Session

Restricted dinner (invited + steering committee)

## Day 3 7th of October

#### Theme 5: Stroke/Retina (Chairs Taglialatela Toni)

9.00 – 9.20 Prof. Surace Enrico Maria- UniNA

"Transcriptional Repression as a Disease-modifying Gene Therapy for Gangliosidosis"

9.20 – 9.40 Prof. Pignataro Giuseppe- UniNA

To be determined.

9.40 – 10.00 Prof. Toni Danilo- UniROMA1

To be determined.

10.00 – 10.20 Prof. Siciliano Gabriele – UniPI

"Retina-Gut-Brain Axis and Paths to Interfere at RNA level with Neurodegeneration in ALS and AD: from Mouse Models to Clinical Correlates"

10.20 – 10.40 Prof. Espinoza Stefano – UniPO

"SINEUP Targeting PRPF31 for Retinitis Pigmentosa 11: a Proof of Concept for an Innovative, Effective Therapy"

10.40 - 11.00 Prof. De Falco Sandro-CNR

"Proof-of-concept of Gene Editing Approach to Inhibit Pathological Neovascularization in Agerelated Macular Degeneration"

11.00 – 11.30 Coffee break

## **11.30-12.30 Plenary Lecture**

#### **Prof. Michael Chopp**

Vice Chairman for Research of the Department of Neurology Scientific Director of the Henry Ford Neuroscience Institute The Zoltan J. Kovacs Chair in Neuroscience Research Detroit, USA

"Small Extracellular Vesicles-outsized Therapeutic Effects on Stroke and Neural Injury"

12.30 – 13.00 Concluding Remarks







End at 13 00 pm