Conference
“RNA Metabolism:
Changing Paradigms in Neurodegeneration”
Trieste, Italy
26 – 29 May 2014

PRELIMINARY PROGRAMME

Monday 26 May
13.00  Registration
14.45  Welcome and general information

Session I – New (and old) genes in neurodegeneration and brain development
Chairman: Stuart Pickering-Brown
15.00  Aaron Gitler
       RNA-binding proteins with prion-like domains in neurodegenerative diseases
15.45  Antonella Alberici
       Clinical and neuroimaging phenotypes in monogenic FTLD
16.05  COFFEE BREAK
16.30  Vincenzo Silani
       From TARDBP and FUS/TLS to C9orf72 in ALS/FTD: further changing paradigms in the genotype-phenotype correlation
17.15  Jernej Ule
       Insights from age-dependent region-specific gene expression in human brain
18.00  WELCOME COCKTAIL

Tuesday 27th May

Session II – TDP-43 and FUS pathology
Chairman: Aaron Gitler
9.00   Francisco Baralle
       New insights in TDP-43 aggregation processes
9.45   Philipp Kahle
       Regulation of unconventional ubiquitinylation of TDP-43
10.05  Dorothee Dormann
       Cellular stress impairs the physiological function of TDP-43
10.25  COFFEE BREAK
11.00 John P. Taylor  
RNA Granule dynamics and neurodegeneration

11.45 Fabian Feiguin  
Chronological requirements of TDP-43 function in synaptic organization and locomotive control

12.05 Emanuele Buratti  
New insights on TDP-43 structural and splicing processes

12.50 Antonia Ratti  
Function and dysfunction of RNA metabolism in ALS

13.10 Lorenzo Errichelli  
Role of 3'UTR of FUS in Amyotrophic Lateral Sclerosis disease

13.30 Session III – TDP-43 and FUS animal models  
Chairman: Philipp Kahle

15.00 Eva So  
An emerging role of FUS at the neuromuscular junction: implications for ALS and FTD pathogenesis

15.45 Lionel Muller-Igaz  
Reversible behavioral phenotypes in a conditional mouse model of TDP-43 proteinopathies

16.05 Bettina Schmid  
In vivo function of TDP-43 in zebrafish

16.25 Abraham Acevedo-Arozena  
Missense mutations in mouse Tardbp differentially affect TDP43 functions

16.45 Kevin Talbot  
Physiological models of TDP-43 related amyotrophic lateral sclerosis

17.05 Coffee Break and Poster Session

Wednesday 28th May

Session IV – C9orf72 pathology  
Chairman: Vincenzo Silani

9.00 Leonard Petrucelli  
RNA-mediated toxicity and therapeutic approaches for c9FTD/ALS

9.45 Boris Rogelj  
RNA-binding proteins that bind ALS- and FTLD-associated hexanucleotide repeat expansion mutation

10.05 Adrian Isaacs  
Investigating RNA toxicity in C9orf72 FTD/ALS

10.25 Coffee Break
11.00 Stuart Pickering-Brown
*Cellular modeling of the C9orf72 repeat expansion*

11.45 John Van Swieten
*C9orf72 repeat expansions: form patient to mouse model*

12.05 Bob Baloh
*Cellular and animal models to understand C9ORF72 repeat expansion in ALS and FTLD*

12.25 Davide Trotti
*Neuronal toxicity of the ALS/FTD-linked GGGGCC repeat expansions within the C9ORF72 gene*

13.10 **LUNCH**

**Session V – MicroRNAs and molecular pathways in ALS/FTD**
Chairman: Leonard Petrucelli

15.00 Eran Hornstein
*Causes and consequences of microRNA dysregulation in ALS*

15.20 Fen Biao-Gao
*The roles of microRNAs in FTD-ALS spectrum disorders*

16.05 **COFFEE BREAK**

16.35 Michael Strong
*miRNA modulation of NEFL mRNA stability in ALS*

17.20 Peter Heutink
*CAGEseq expression profiling for genetically distinct forms of frontotemporal dementia (FTD) reveals common and distinct molecular pathways*

18.05 **END OF SESSION**

**Thursday 29th May**

**Session VI – New discoveries and therapeutic approaches**
Chairman: to be confirmed

9.00 Clotilde Lagier-Tourenne
*Targeted degradation of sense and antisense C9orf72 RNA foci as therapy for ALS and frontotemporal degeneration*

9.45 Andrea D’Ambrogio
*hiCLIP identifies long-range RNA structures involved in the Unfolded Protein Response*

10.05 Patrizia Longone
*Activity-dependent expression of heterogeneous nuclear ribonucleoprotein (hnRNP) mRNAs in neurons: regulated translation at the synapse*

10.25 **COFFEE BREAK**

11.00 Dina Morshed
*The presence of the fibrillar form of alpha-synuclein moderate dopamine cytotoxicity*

11.20 Tatyana Shelkovnikova
*Multistep process of FUS aggregation in the cell cytoplasm involves RNA-dependent and RNA-independent mechanisms*

11.40 **CLOSING OF THE MEETING**