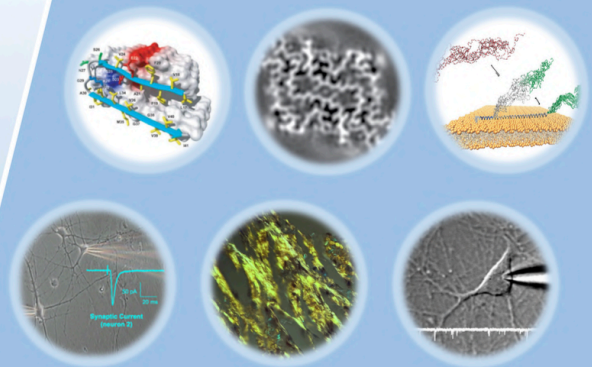


Protein misfolding and aggregation in disease



Mantova
12th-14th February 2025
Polo Universitario

Organizers: Fabrizio Chiti, Mario Nuvolone, Stefano Ricagno.

Program in detail

Wednesday 12th February - Afternoon

13.45-14.00

Welcome Message by the Organizers

14.00 – 17.30

First Session - "*Mechanisms of misfolding*"

Chairs: Antonino Natalello (Università di Milano Bicocca), **Claudia Martini** (Università Di Pisa)

14.00-14.30

Vittorio Bellotti (Università di Pavia)

TTR amyloidosis: from mechanisms to therapy

14.30-15.00

Mario Salvatore Clerici (Università di Milano)

Neuroinflammation: a focus on alzheimer's disease.

15.00-15.15

Matteo De Rosa (CNR, Milano)

Gelsolin amyloidosis, an old foe with new faces

15.15-15.30

Raffaella Bonavita (Università di Napoli Federico II)

The HSPB1-p62/SQSTM1 functional complex regulates the EV-mediated secretion and spreading of mutant huntingtin

15.30-16.00

Coffee break

16.00-16.30

Adele di Matteo (CNR, Roma)

Fragile X Messenger Ribonucleoprotein (FMRP): exploring KH domains folding dynamics, aggregation and FXS mutations

16.30-17.00

Alfonso de Simone (Università di Napoli Federico II)

Structure-Toxicity Relationship in the Amyloid Assembly Pathway

17.00-17.15

Luca Brogгинi (Università di Milano)

Structural characterization of Atrial Natriuretic Peptide amyloid fibrils from Isolated Atrial Amyloidosis patients

17.15-17.30

Monica Russo (Università di Pavia)

Dissecting the pathogenic role of N-glycosylation in AL amyloidosis

17.30 – 19.00

Poster Session 1 (Surname initials from "A" to "Lim")

Thursday 13th February - Morning

09.00 – 13.00

Second Session - "Aggregation and toxicity"

Chairs: Patrizia Polverino de Laureto (Università di Padova), **Mariapina D'Onofrio** (Università Di Verona)

09.00–09.30

Valentina Carabelli (Università di Torino)

Effect of exogenous α -synuclein on dopamine release and neuronal firing in *Substantia Nigra* dopaminergic neurons

09.30–10.00

Daniela Puzzo (Università di Catania)

Role of Amyloid-beta peptide in the healthy brain and in Alzheimer's disease

10.00–10.30

Annalisa Relini (Università di Genova)

Protein aggregation and interaction with lipid membranes studied by atomic force microscopy

10.30–10.45

Anna Carta (Università di Cagliari)

Modelling α -synuclein toxicity in vivo: oligomers at the intersection between immune responses and neurodegeneration

10.45–11.00

Lucia Bellanova (Università di Parma)

Development of fluorescent proteins for intracellular nitric oxide detection

11.00–11.30

Coffee break

11.30–12.00

Serena Carra (Università di Modena e Reggio Emilia)

SUMO2/3 conjugation of TDP-43 protects against aggregation

12.00–12.30

Valentina Bessi (Azienda Ospedaliera Universitaria di Careggi, Firenze)

Alzheimer's Disease: from Molecular Mechanisms to Clinical and Therapeutic Advances

12.30–12.45

Niccolò Candelise (Istituto Superiore di Sanità, Roma)

Proteostasis Network response to chronic environmental stress: linking survival to aggregation in neuroblastoma cells

12.45–13.00

Katiuscia Pagano (CNR, Milano)

Real time characterization of A-beta oligomers distribution along the amyloid aggregation pathway by diffusion NMR

13.00 – 14.00

Lunch break

Thursday 13th February - Afternoon

14.00 – 17.30

Third Session - "*Models of disease*"

Chairs: Eugenio Barone (Università di Roma La Sapienza), **Annalisa Bellucci** (Università Di Brescia)

14.00–14.30

Luisa Diomede (Istituto Mario Negri, Milano)

What a nematode can tell us about human amyloidosis

14.30–15.00

Benedetta Bolognesi (Institute for Bioengineering of Catalunya, Barcellona)

Deep mutagenesis to extract mechanistic insights into amyloid transition states

15.00–15.15

Davide Colaianni (Università di Padova)

D. melanogaster as a model for TDP-43-mediated ALS: from molecular mechanisms to therapeutic approaches

15.15–15.30

Filippo Ferri (AniCura Istituto Veterinario Novara)

Systemic AA amyloidosis in shelter cats

15.30–16.00

Coffee break

16.00–16.30

Giuseppe Legname (SISSA, Trieste)

Prion conversion site in the mammalian prion protein

16.30–17.00

Piero Parchi (Istituto delle Scienze Neurologiche di Bologna)

Exploiting the seeding properties of amyloidogenic proteins for the early diagnosis of prion disease and synucleinopathies

17.00–17.15

Gaia Faustini (Università di Brescia)

Unravelling α -synuclein/Synapsin III co-pathology in iPSC-derived midbrain organoids from familial Parkinson disease

17.15–17.30

Carmelo Milioto (University College London)

(GR)400 and (PR)400 knock-in mice exhibit C9ALS/FTD pathology revealing a conserved neuroprotective hallmark

17.30 – 19.00

Poster Session 2 (Surname initials from "Lin" to "Z")

Friday 14th February - Morning

09.00 – 13.00

Fourth Session - "*Leads to therapy*"

Chairs: Luca Piemontese (Università di Bari), Giulio Rastelli (Università Di Modena e Reggio Emilia)

09.00–09.30

Elena Cattaneo (Università di Milano e Senato della Repubblica)

Huntington's Disease from evolution to pathology

09.30–10.00

Angelo Poletti (Università di Milano)

Exploring established and emerging targets to mitigate protein toxicity in motoneuron and neuromuscular diseases

10.00–10.30

Giovanni Palladini (Policlinico di San Matteo, Pavia)

Dispatches from the frontline: unsolved problems in the clinical management of systemic amyloidoses

10.30–10.45

Roberta Cascella (Università di Firenze)

Trodusquemine prevents the formation of insoluble neurotoxic TDP-43 inclusions

10.45–11.15

Coffee break

11.15–11.45

Luigi Bubacco (Università di Padova)

Natively unfolded protein as a target in dopamine catabolite-mediated cellular dyshomeostasis

11.45–12.15

Fabio Moda (Fondazione IRCCS Istituto Neurologico Carlo Besta, Milano)

Hunting down misfolded proteins: seed amplification assays in neurodegenerative diseases

12.15–12.30

Maria Franzini (Università di Pisa)

Plasma Transthyretin and Retinol binding protein in cardiac amyloidosis: an electrophoretic study.

12.30–12.45

Nicolò Bisi (Università di Modena e Reggio Emilia)

Discovery of PHOX15, restoring tau-microtubules interaction and inhibiting tau aggregation in tauopathies models

12.45 – 13.00

Concluding Remarks by the Organizers