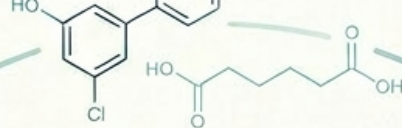




Institut
exposum
UNIVERSITÉ DE MONTPELLIER



SYMPOSIUM ON EXPOSOME AND NEURODEGENERATIVE DISEASES

29 - 30 June 2026

MAIN SCHEDULE AND INVITED SPEAKERS INTRODUCTIONS

FABRIZIO CHITI
SALVADOR VENTURA
ALEXANDER KAI BUELL
ANDREY KAJAVA
MARION MORTAMAI

SANDRINE ONGERI
SYLVAIN LEHMANN
AXEL ABELEIN
HUMAN REZAEI
VÉRONIQUE PERRIER

ORGANIZORS : ANTONIO CHOPIN (L2C), MARTA GARRIDO-ALVAREZ (IBMM), CÉLIA DABA (INM)



IBMM
Institut des
Biomolécules
Max Mousseron

SCHEDULE - 29TH, JUNE

08H30 : Welcoming of participants

08H50 - 09H00 : Opening of the Symposium

09H00 - 09H35: Performance of the Five Most Widely Used Algorithms in Predicting Amyloid Structure. From Single Structures to Structural Polymorphism
Fabrizio Chiti
University of Florence, Florence, Italy

09H35 - 10H10 : In silico Prediction of Protein Aggregation and Co-aggregation
Andrey Kajava
CRBM, CNRS, Montpellier, France

10H10 - 10H45 : The Thermodynamic Stability of Amyloid Fibrils
Alexander K. Buell
Technical University of Denmark (DTU), Denmark

10H45-11H15 – COFFEE BREAK + POSTER SESSION

11H15 - 11H45 : A Structure-Based Strategy to Target Pathogenic α -Synuclein in Parkinson's Disease
Salvador Ventura
IBB,UAB, Barcelona, Spain

11H45 - 12H20: Non-fibrillar prion protein oligomers transmit structural information during early assembly
Human Rezaei
INRAE, Paris, France

12H25 - 14H25 : LUNCH + POSTER SESSION

14:25-14:35 : Presentation ExposUM:
Charlotte Boullé

14:35 - 15:05 : **TedXpUM Presentations**
Célia Daba, Marta Garrido-Alvarez, Antonio Chopin

15:05 - 16:00 : Round table discussion

16H00-16H30 – COFFEE BREAK + POSTER SESSION

16H30 - 16H50 : BEAMM: Beta-Arch Multi-Model predictor for the detection of amyloidogenic Regions **Quoc Khang Le**

16H50 - 17H10 : Advancing Conformational Biomarkers in Alzheimer's Disease through Detection of A β Fibril Polymorphs in Human CSF **Nathan Meyer**

17H10 - 17H30: Interdisciplinary approach to understand the mechanisms of Alzheimer's disease induced by viral infections **Patrizia Felicetta Russo**

17H30 - 17H50 : Comparison of extracellular vesicles isolation methods reveals method-dependent protein and miRNA profiles **Carolyn Thibal**

SCHEDULE - 30TH, JUNE

09H - 09H30 : Air Pollution, Amyloid Pathology and Dementia: Contributions from Environmental Epidemiology
Marion Mortamais
INSERM, University of Montpellier, France

09H35 - 10H : Fungicide exposure differentially affects Alzheimer's disease marker aggregation in two transgenic mouse models
Véronique Perrier
INM, CNRS, Université de Montpellier, France

10H00 - 10H30 : Amyloid biomarkers for Alzheimer Disease: diagnostic performance, prevalence and clinical utility
Sylvain Lehmann
INM, INSERM, CHU Montpellier, University of Montpellier, France

10H30-11H00 : COFFEE BREAK

11H00 - 11H30 : Rational design of peptides and peptidomimetics inhibiting the aggregation of Tau and α -Synuclein in vitro and in cells
Sandrine Onger
BioCIS, CNRS, Université Paris-Saclay, France

11H30 - 12:00 : Anti-amyloid molecular chaperones – new perspectives in finding treatments against neurodegenerative diseases
Axel Abelein
Department of Biology and Biological Engineering, Chalmers University of Technology, Sweden

12H00: LUNCH

CLOSURE OF THE EVENT

INVITED SPEAKERS



Prof. Fabrizio Chiti attained a Master Degree in 1995 in Biological Sciences at the University of Florence, Italy, and a PhD degree (D.Phil) in Chemistry in 1999 from the University of Oxford under the supervision of Prof. C.M. Dobson. After three years of post-doc in Florence and Cambridge, in November 2002 he became Associate Professor of Biochemistry at the University of Florence and is now, starting from December 2010, Full Professor. His scientific interests concern the elucidation of protein folding and protein aggregation processes, the identification of the molecular determinants of the toxicity of protein aggregates, the study of the effect of chaperones on these processes, the mechanisms of cellular toxicity and of putative drugs against protein aggregates.

Dr Andrey Kajava holds the position of Director of Research at the CNRS in France and heads the Structural Bioinformatics and Molecular Modeling group at the Centre de Recherche de Biologie cellulaire de Montpellier. He has conducted research in leading laboratories in Russia, Germany, Belgium, Switzerland, and the United States, and has coordinated projects funded by the NIH, EU, and French agencies. He has long served as an Associate Editor of the Journal of Structural Biology. He is a highly cited researcher with over 180 published articles. His research combines computational structural biology and bioinformatics, with a focus on predicting protein amyloidogenicity from sequence data using structure-based and AI approaches, enabling individualized risk profiling for disease and advancing personalized medicine.



Dr Axel Abelein's research aims to understand the underlying mechanisms of amyloid formation and to find treatments against neurodegenerative disorders, such as Alzheimer's and Parkinson's disease, utilizing natural occurring molecular chaperones. He and his team apply a broad range of biophysical and biochemical methods, with a focus on structural biology and protein aggregation kinetics.

Prof. Alexander K. Buell studied Chemistry in Tübingen, Paris and Sydney and did his PhD and postdoc in Biophysics in Cambridge, UK from 2008-2015. He was Assistant Professor of Physical Biology at the University of Düsseldorf from 2015 -2019. In 2019, he took up a professorship in Protein Biophysics at the Technical University of Denmark. He is a recipient of an ERC consolidator grant and of the Danish EliteForsk prize. His research interests are protein self-assembly and aggregation in Biology, Medicine, Food and Materials Science. He has developed a range of novel methods to study amyloid fibril formation as well as biomolecular condensates.



INVITED SPEAKERS



Prof. Sylvain Lehmann is a full Professor at the University Hospital of Montpellier. After a MD/PhD in Strasbourg (1991&1992) with residency in Neurology and Pathology Dpt. he completed his training at Washington University (St Louis, USA) as a postdoctoral researcher and then as an assistant professor (1993-1996). From 1997 to 2002 he was a researcher of the French National Institute of Health before obtaining in 2003 a position as Professor at the Faculty of Medicine of Montpellier. His work focuses on the biology of neurodegenerative diseases (Prion, Alzheimer's...). His clinical routine and R&D laboratory carries out biological diagnosis of dementia and he is involved in several innovative national (ANR, PHRC) and international (FP7, H2020) biomarker research programs using mass spectrometry and ultrasensitive assays.

He is the director of the Institute of Neurosciences of Montpellier (Inserm INM, UMR1198) and the director of the Montpellier Center of Excellence in Neurodegenerative Diseases (CoEN www.coen.org).

Dr. Marion Mortamais is an Associate Professor at the University of Montpellier and is affiliated with the Institute for Neurosciences of Montpellier (Inserm U1298), within the NeuroPEPS team. She is an environmental epidemiologist whose research focuses on the impact of environmental exposures—particularly ambient air pollution—on human health, with a specific emphasis on brain ageing.

She has led or co-authored numerous peer-reviewed publications investigating the effects of ambient air pollution on cognitive decline and dementia in older adults, as well as on brain development in children



Prof. Sandrine Onger obtained her PhD in 1999 after three years in Paris (Fr) and one year in Oxford (UK). She then completed a postdoctoral fellowship in Milan (Italy) funded by a European project. She became Associate Professor in 2001 and full Professor of medicinal chemistry in 2011. Her expertise covers the design and synthesis of peptides, peptidomimetics, and foldamers targeting protein-protein interactions, including A β protein, hIAPP, synuclein and tau aggregation. Her research group at Université Paris-Saclay (FluoPÉPIT at BioCIS CNRS/ Upsaclay) brings together medicinal, organic and biophysical chemists. Her supervisory work includes 24 defended doctoral theses (10 co-supervised with Italy and Germany), 3 ongoing theses, 9 post-doctoral researchers and 17 master's students. She was vice-director and then director of the Doctoral School of Therapeutic Innovation (ITFA) from 2018 to 2024. Since October 2024, she has served as Vice-President of Université Paris-Saclay in charge of doctoral programs (4 500 PhD students across 21 doctoral schools).

INVITED SPEAKERS



Dr Véronique Perrier is a Research Director at the CNRS, based at the Institute of Neurosciences of Montpellier (France), within the Proteinopathies team. Her research focuses on the molecular mechanisms underlying neurodegenerative disorders, particularly Alzheimer's diseases, combining in vitro and in vivo approaches. Her work investigates the impact of environmental pollutants, including pesticides and nanoplastics, on neurodevelopment and neurodegeneration. She currently coordinates the European EXPOSIGNALZ consortium (Horizon Europe 2024), bringing together 14 teams across six countries, and is a founding member of the ExpoHealthNet European cluster. She was awarded the Drieu-Chollet Prize from the French National Academy of Medicine for her work on environmental pollutants.

Dr Human Rezaei has long been interested in understanding the molecular mechanisms of prion replication, and more specifically how biological information stored in the shape of protein assemblies can be passed on and evolve during replication. He has dedicated his career to building connections between prion biology and self-replicating complex systems, using a balanced mix of mathematical tools, molecular biophysics, biochemistry, and more recently neuro-biophysics.



Prof. Salvador Ventura is a Professor of Biochemistry and Molecular Biology at the Universitat Autònoma de Barcelona (UAB) and co-founder of Eureka Nanobioengineering. He has received numerous prestigious awards, including the Bruker 'Manuel Rico' Prize, multiple ICREA Academia awards, the Narcís Monturiol Medal, and the Serra Hunter Knowledge Transfer Award. He is a member of the Academia Europaea. As a Group Leader at the Institute of Biotechnology and Biomedicine (IBB) of UAB, where he previously served as Director, he has authored over 320 scientific publications and holds 19 patents. His research focuses on the relationship between protein misfolding and neurodegenerative diseases, aiming to develop novel therapeutic strategies against these disorders.

HOW TO COME TO THE EVENT

FULL ADDRESS :

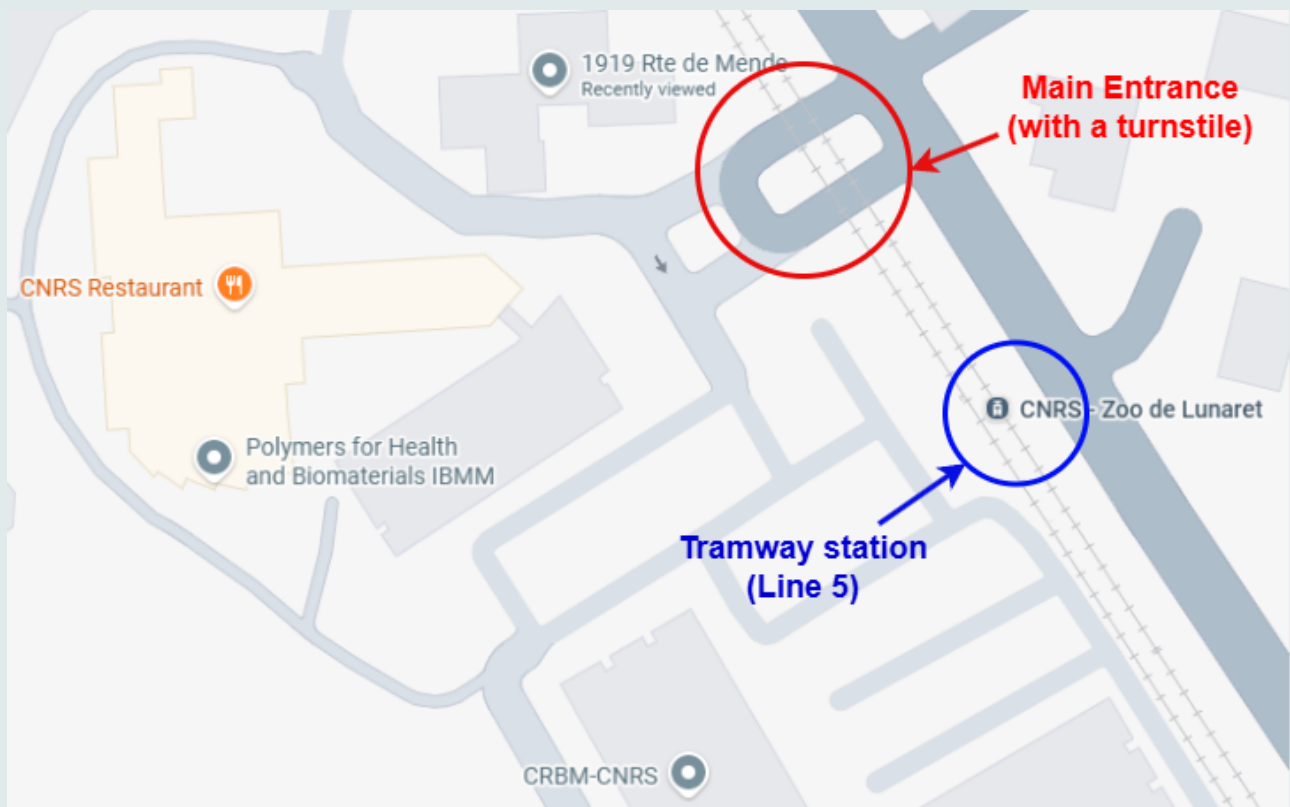
Délégation Occitanie Est
1919 route de Mende
34293 Montpellier
cedex 5 - France

PUBLIC TRANSPORT - BY TRAM :

- **Line 1** : Direction 'Mosson'
=> get off at "*Place Albert 1er - Saint Charles*"
- **Change from Line 1 to Line 5**
- **Line 5** : Direction 'Clapiers'
=> Get off at "*CNRS - Zoo du Lunaret*"

Important note : *The main entrance has a turnstile and requires a pass to enter. Make sure to arrive at the right time each day to be able to access the event :*

- **29TH OF JUNE : 8H30 - 8H45**
- **30TH OF JUNE : 8H45 - 9H00**





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UNIVERSITÉ DE MONTPELLIER

**AN EVENT TO RAISE AWARENESS
ON AMYLOID-INDUCED DISEASES
AND UNDERSTAND HOW SCIENCE
DEALS WITH IT.**

Scan the QR code to register (it takes a few minutes) :



Thank you and see you in June !