

XXI SUMMER SCHOOL OF NEUROSCIENCE

15-19 JULY, 2024

CATANIA, ITALY

MEMORY DEFICIT AND DEMENTIA: ADVANCEMENTS IN PHYSIOLOGY AND TREATMENT HOPE

SCIENTIFIC DIRECTOR: Prof. Giuseppe Di Giovanni



15th JULY

- 08:30 **Opening**
Filippo Drago and **Giuseppe Di Giovanni**
Morning Lecture
- 09:00-10:00 **From memory loss to memory mastery: unveiling the power of superior memory**
Patrizia Campolongo, Department of Physiology and Pharmacology, Sapienza University of Rome, Italy.
- 10:00-10:30 Interactive discussion
- 10:30-11:30 **Neurochemistry and dementia: focus on monoamines in Alzheimer's disease**
Philippe De Deurwaerdere, Institut des Neurosciences Cognitives et Intégratives d'Aquitaine. CNRS Unité Mixte de Recherche, Bordeaux, France.
- 11:30-12:00 Interactive discussion
- Afternoon Lecture**
- 15:30-16:30 **The hippocampus in depth: new vistas on an old circuit**
Liset M de la Prida, Instituto Cajal - CSIC, Madrid, Spain.
- 16:30-17:00 Interactive discussion
- 17:00-18:00 General discussion

16th JULY

- Morning Lecture**
- 09:00-10:00 **Cognitive comorbidities of absence seizures**
Sandra Vaz, Instituto de Medicina Molecular João Lobo Antunes, Faculty of Medicine, University of Lisbon, Portugal.
- 10:00-10:30 Interactive discussion
- 10:30-11:30 **Memory & dementia: A role for GLT-1-mediated hyperexcitability**
Fiorenzo Conti, Department of Medicine Experimental and Clinical, Polytechnic University of Marche; and Center for Neurobiology of Aging, IRCCS INRCA, Ancona, Italy.
- 11:30-12:00 Interactive discussion
- Afternoon Lecture**
- 15:30-16:30 **Chronic stress and exosome as key players in precipitation and diagnosis of Alzheimer's disease**
Ioannis Sotiropoulos, Institute of Biosciences and Applications, NCSR "Demokritos", Agia Paraskevi, Greece.
- 16:30-17:00 Interactive discussion
- 17:00-18:00 General discussion

Under the auspices of:



17th JULY

- Morning Lecture**
- 09:00-10:00 **Neurobiological links between depression and Alzheimer's disease: novel pharmacological targets for future disease-modifying strategies**
Filippo Caraci, Department of Medicine and Health Sciences - University of Catania, Italy.
- 10:00-10:30 Interactive discussion
- 10:30-11:30 **Advancing brain health: integrating sex as a biological variable in Alzheimer research**
Laura Castro, Women's Brain Project, Zurich, Swiss.
- 11:30-12:00 Interactive discussion
- Afternoon Lecture**
- 15:30-16:30 **FTLD - how pathology and genetics influence the development of biomarkers**
Ivana Delalle, Boston University, Chobanian and Avedisian School of Medicine (BUCASM), Boston, USA.
- 16:30-17:00 Interactive discussion
- 17:00-18:00 General discussion

18th JULY

- Morning Lecture**
- 09:00-10:00 **Explaining the role of Tau in Neurodegeneration**
Rohan de Silva, UCL Queen Square Institute of Neurology, London, UK.
- 10:00-10:30 Interactive discussion
- 10:30-11:30 **The olfactory trail in dementias**
Rafael Franco, Department of Biochemistry and Molecular Biomedicine, Faculty of Biology, University of Barcelona, Spain.
- 11:30-12:00 Interactive discussion
- Afternoon Lecture**
- 15:30-16:30 **Inflammasome activation may represent the missing link between altered amyloid precursor protein metabolism and the accumulation of phosphorylated tau protein in the Alzheimer's disease brains**
Goran Šimić, University of Zagreb School of Medicine, Croatian Institute for Brain Research, Zagreb, Croatia.
- 16:30-17:00 Interactive discussion
- 17:00-18:00 General discussion

19th JULY

- Morning Lecture**
- 09:00-10:00 **Bridging the divide: Beta-Amyloid's dual role in brain health and Alzheimer's disease**
Daniela Puzzo, - Department of Biomedical and Biotechnological Sciences, University of Catania, Italy.
- 10:00-10:30 Interactive discussion
- 10:30-11:30 **Elsevier workshop on how to get published in a scientific journal**
Giuseppe Di Giovanni, Cardiff University, UK; University of Malta, MT and University Magna Græcia of Catanzaro, Italy.
- 11:30-12:30 Presentation of the research projects by participants
- 12:30-13:00 Closing remarks