



UNIVERSITÀ
DEGLI STUDI
DI MILANO



Fondazione
CARIPLO



LAKE COMO SCHOOL OF ADVANCED STUDIES

Membrane Trafficking in Health and Disease Focus on Neurological Diseases

14th - 18th October 2024

Invited Speakers

Pietro De Camilli (Yale university, New Heaven, USA)

Gilbert Di Paolo (Columbia University, New York, USA)

Shawn Ferguson (Department of Cell Biology, Yale University, USA)

Thierry Galli (Institute of Psychiatry and Neuroscience of Paris, Paris, France)

Evelina Gatti (CNRS, INSERM, Marseille, France)

Volker Haucke (Leibniz-Forschungsinstitut für Molekulare Pharmakologie Berlin, Germany)

Michela Matteoli (Humanitas University, Milan, Italy)

Peter McPherson (Montreal Neurological Institute, Montreal, Canada)

Ira Milosevic (University of Oxford, Oxford, UK)

Silvia Coco (Università Bicocca, Milan, Italy)

Davide Pozzi (Humanitas University, Milan, Italy)

Michele Solimena (Paul Langherans Institute, Dresden, TU Dresden, Germany)

Kohji Takei (Okayama University, Okayama, Japan)

Roberto Zoncu (Department of Molecular and Cell Biology, Berkeley, USA)

Organized by Michela Matteoli, Thierry Galli, Michele Solimena

Maria Paola Canevini and Davide Pozzi

***PhD students, postdocs and researchers register at
<https://mthd.lakecomoschool.org/>***



Villa del Grumello
Via per Cernobbio 11
22100 Como, Italy
Tel. +39. 031. 579813
E-mail: info@lakecomoschool.org
www.lakecomoschool.org

Membrane Trafficking in Health and Disease: Focus on Neurological Diseases

Villa Grumello, Como, Italy

Organiser: Other

Website: <https://mthd.lakecomoschool.org/>

Attendance type(s): In Person

Event Dates: 14 Oct–18 Jul 2024

- 14/10/2024 from 1:00 pm to 6:00 pm
- 15/10/2024 from 9:00 am to 6:00 pm
- 16/10/2024 from 9:00 am to 6:00 pm
- 17/10/2024 from 9:00 am to 6:00 pm
- 18/07/2024 from 9:00 am to 1:00 pm

Registration Deadline: 22 Aug 2024

In the last thirty years, tremendous progress has been made in the elucidation of the molecular and cellular mechanisms regulating membrane trafficking and turnover in mammalian cells, e.g., exocytosis, endocytosis and the lysosomal clearance of proteins and lipids through autophagy. The field is now able to explore how defects of membrane trafficking can lead to diseases, particularly neurodevelopmental and neurodegenerative disorders. The school will overview the last decades of seminal advances in the field: the lessons learned about regulated and unconventional exocytosis, the role of lysosomes in degradation and secretion, the dynamics, metabolism and signalling of lipids, and the role of the immune system in regulating the synapse and neuronal function.

Program

Day 1. Monday 14th

11-12. welcoming

13.00. Lunch

Secretion and degradation I

14:30. Thierry Galli: “Unconventional Secretion in the Nervous System”

16:00. Silvia Coco: “Mesenchymal Stem Cell Extracellular Vesicles: A New Challenge for Brain Diseases?”

Social Dinner.

Day 2. Tuesday 15th

Membrane Trafficking and neurodegeneration

9:00. Shawn Ferguson: “Lysosome Dysfunction in Neurodegenerative Disease”

10:30. Peter McPherson: “DENN-Domain-Mediated Regulation of Rab GTPases in Neurological Disease

Social Event: Visit of Como and Museum

13.30. Lunch

Membrane dynamics at the synapse

14:30. Kohji Takei: “Interplay between Membrane Dynamics and Cytoskeletal Dynamics”

16:00. Ira Milosevic “Towards understanding synaptic transmission in the ageing brain”

17:15. Coffee Break

17:30. Student Session I

Day 3. Wednesday 16th

Secretion and degradation I

9:00. Michele Solimena: “Secretory Granules/Large Dense Core Vesicles: The Other Side of Regulated Exocytosis. Lessons from the Pancreatic Islet Beta Cells””

10:30. Roberto Zoncu: “Lysosomes in Nutrient Sensing and Cellular Growth Control”

Social Event: visit of the Villa of Grumello and botanical Garden

13.30. Lunch

Membrane Trafficking and neurodegeneration II

14:30. Volker Haucke: “Lipid Switches in Cell Physiology: From Membrane Dynamics to Disease”

16:00. Gilbert Di Paolo: “Role of Lipids in Neurodegeneration”

17:15. Coffee Break

17:30. Student Session II

Day 4. Thursday 17th

Neuroimmunology

9:30. Michela Matteoli: “The Synapse as a Target of the Immune System: Role of Microglia”

10:30. Evelina Gatti: “Unconventional Secretion Linking Cellular Stress and Innate Sensing: Lessons for the Neuroimmune Dialogue”

Social Event: Sailing on the lake

Lunch

16:30. Davide Pozzi: “The Synapse as a Target of the Immune System: Role of Cytokines”

Day 5. Friday 18th

10:00. Keynote Lecture: Pietro De Camilli.

Introduced by Prof. Maria Paola Canevini

11:00. Final discussion with all speakers and students

13:00. Lunch

Departure