International School of Precision Medicine and Laboratory Medicine

Directors: Prof. Marcello Ciaccio, Prof. Francesco Salvatore

4th Course ALZHEIMER'S DISEASE IN THE ERA OF PRECISION MEDICINE: FROM SCREENING TO THERAPY

Directors of the Course:
Prof. Marcello Ciaccio, Prof. Alessandro Padovani



PURPOSE OF THE COURSE

Alzheimer's Disease (AD) remains one of the most pressing public health challenges of our time, with rising prevalence due to global population aging and no definitive cure currently available. Traditionally considered a uniform clinical entity, AD is now recognized as a biologically heterogeneous condition with diverse trajectories, underpinned by complex interactions between genetic, molecular, environmental, and lifestyle factors.

The era of Precision Medicine has opened a new frontier in the fight against Alzheimer's Disease. By shifting from a one-size-fits-all approach to a model that considers individual variability in genes, biomarkers, and disease progression, Precision Medicine offers the promise of earlier diagnosis, more accurate risk stratification, and tailored therapeutic strategies.

Recent advances in fluid biomarkers, neuroimaging, genomics, and artificial intelligence are transforming both research and clinical practice. Blood-based biomarkers along with novel imaging tracers and digital cognitive assessments, are enabling earlier and more accessible detection. Meanwhile, the development of targeted treatments, including anti-amyloid and anti-tau therapies, is paving the way for disease-modifying interventions—potentially altering the course of AD.

This evolving landscape demands close collaboration between neurologists, clinical biochemists, laboratory specialists, and researchers.

By fostering interdisciplinary dialogue, the course aims to bridge the gap between bench and bedside, preparing healthcare professionals to navigate the complexities of Alzheimer's Disease in this new era of precision health.

SCIENTIFIC COMMITTEE

Marcello Ciaccio Alessandro Padovani Lucilla Parnetti Francesco Salvatore Mario Zappia

SCIENTIFIC SECRETARY

Luisa Agnello Anna Maria Ciaccio Lorenzo Gaetani Caterina Maria Gambino Andrea Pilotto Concetta Scazzone

ORGANIZING COMMITTEE

Francesco Cacciabaudo Rosaria Vincenza Giglio Anna Masucci Silvia Matracia Sabrina Novara Alessandro Pitruzzella Martina Tamburello Roberta Vassallo

Gruppo di Studio SIN «Biomarcatori in Neurologia» Gruppo di Studio SIBioC-Medicina di Laboratorio «Biomarcatori in Neurologia»

Con il patrocinio di





















FACULTY

Luisa Agnello, Palermo Federica Agosta, Milano Alberto Benussi. Trieste Valentina Bessi. Firenze Marco Bozzali. Torino Filippo Brighina, Palermo Annachiara Cagnin, Padova Marcello Ciaccio, Palermo Lorenzo Gaetani, Perugia Cesare Gagliardo, Palermo Marcello Moccia, Napoli Alessandro Padovani, Brescia Tommaso Piccoli, Palermo Andrea Pilotto, Brescia Giuseppe Salemi, Palermo Francesco Salvatore, Napoli Marina Turco. Palermo Antonino Tuttolomondo, Palermo Laura Vernuccio, Palermo Martina Zaninotto. Padova Mario Zappia, Catania

09:30 Opening remarks **Welcome address by Authorities and Academicians Keynote Lecture** 10:00 The revolution of Laboratory Medicine in Alzheimer's Disease: from postmortem to blood-based diagnosis Alessandro Padovani (Brescia) Chair: Marcello Ciaccio (Palermo) Alzheimer's Disease Screening: Utopia or Reality? Chair: Francesco Salvatore (Napoli), Mario Zappia (Catania) Circulating biomarkers in early screening 10:45 Lorenzo Gaetani (Perugia) 11:05 Genetic risk factors and personalized risk scores Marcello Moccia (Napoli) Early detection of Alzheimer's Disease: the case of Subjective Cognitive 11:25 Decline Valentina Bessi (Firenze) Discussion 11:45 12:00 **Round Table** Multidisciplinary Collaboration for optimal Alzheimer's Patient care: **Experts in discussion** Discussant: Marina Turco (Palermo) Partecipant: Marcello Ciaccio, Alessandro Padovani, Mario Zappia, Laura Vernuccio, Francesco Salvatore, Marco Bozzali, Federica Agosta, Annachiara Cagnin, Filippo Brighina, Antonino Tuttolomondo, Tommaso Piccoli 13:00 Light lunch

	Integrating Clinical Medicine and Laboratory Medicine: toward accurate diagnosis and prognosis in Alzheimer's Disease Chair: Marco Bozzali (Torino), Annachiara Cagnin (Padova)
14:15	ATX(N) framework and its application in routine practice Martina Zaninotto (Padova)
14:35	Neuroimaging advances Cesare Gagliardo (Palermo)
14:55	Promoting Laboratory-Neurology collaboration in prognostic modeling <i>Andrea Pilotto (Brescia)</i>
15:15	Discussion
	Targeted therapies and personalized interventions in Alzheimer's Disease Chair: Giuseppe Salemi (Palermo), Laura Vernuccio (Palermo)
15:30	The Role of Laboratory Medicine in the Landscape of Alzheimer's Disease Treatment Luisa Agnello (Palermo)
15:55	Anti-amyloid therapies: opportunities and challenges from real-world experience Federica Agosta (Milano)
16:15	Future directions in anti-tau and neuroprotective interventional strategies Alberto Benussi (Trieste)
16:35	Discussion
16:45	Closing Remarks and end of the Course

GENERAL INFORMATION

CONGRESS VENUE

ETTORE MAJORANA FOUNDATION AND CENTRE FOR SCIENTIFIC CULTURE Piazzetta S. Domenico 91016 ERICE (Sicily) – Italy

REGISTRATION

Registration is free and includes admission to scientific sessions, conference materials, coffee breaks, and certificate of attendance.

CONTINUING MEDICAL EDUCATION

Provider: BIOMEDIA - N. 148

N. ECM: 460481

Professional Category: Biologist, Chemist, Medical Doctor, Biomedical Laboratory Technician.

Hours of training: 6

Credits: 4,2

In order to obtain credits, participants must attend the full educational programme (90% of the meeting) and pass the final learning test available on line on the site https://elearning.biomedia.it/

Test will be on-line from 17th October to 20th October 2025

CERTIFICATE OF ATTENDANCE

A certificate of attendance will be available online after the meeting in MyLogin area on https://elearning.biomedia.it

Unrestricted grant by

MAJOR SPONSOR



BRONZE SPONSOR







Segreteria Organizzativa Biomedia srl - Via L. Temolo 4 - 20126, Milano Tel. 02/45498282 | E-mail: convegni@biomedia.net