





NeuroMl 2019

Fifth International Meeting Food for Brain: promoting health and preventing diseases

20-22 November 2019

Università di Milano-Bicocca, Milan, Italy

SCIENTIFIC PROGRAMME

in collaboration with





Consiglio Nazionale delle Ricerche





Under the auspices of









Associazione Italiana di Psicologia







Presidents of the Symposium

Carlo Ferrarese, Massimo Labra, Paola Palestini, Eraldo Paulesu, Marina Saresella, Giuseppe Vallar

Scientific Board

Marco Antoniotti, Gabriella Bottini, Guido Cavaletti, Giuseppe Chirico, Massimo Clerici, Annamaria Colangelo, Giovanni Corrao, Angelo Maravita, Massimo Masserini, Rosa Maria Moresco, Massimo Musicco, Andrea Ongaro, Carlo Reverberi, Marina Saresella, Luca Stanca

Executive Board

Paola Di Rienzo, Gessica Sala

THE VENUE

University of Milano-Bicocca, Milan, Italy Piazza dell'Ateneo Nuovo, 1 - Milano



Credits: Università Milano Bicocca



NEUROMI 2019 INTERNATIONAL MEETING HIGHLIGHTS

The **Milan Center for Neuroscience** (www.neuromi.it) was founded in 2014 by the University of Milano-Bicocca to promote high-level multidisciplinary research and education in the field of Neuroscience, fostering collaborations among clinical, molecular, cognitive, imaging, computational and biotechnological fields.

It now gathers more than 300 neuroscientists from 8 Departments of Milano-Bicocca, other Universities and Scientific Institutions from the Milan area.

This is the **fifth NeuroMI international meeting**. Previous ones have been "Imaging of the brain" (2015), "Prediction and prevention of dementia: new hope" (2016), "Personalised medicine in multiple sclerosis" (2017), "Brain stimulation and brain plasticity: from basic research to clinical practice" (2018).

"Food for brain: promoting health and preventing diseases" is the topic of this fifth international meeting, organized in collaboration with **Best4Food**, a multidisciplinary Center of the University of Milano-Bicocca dedicated to food research. Within Best4Food more than 100 scientists investigate the food chain - including transformation, distribution, consumption and labeling – to enhance food nutritional properties and to identify the most suitable strategies to improve environmental sustainability and human life quality.

Diets inextricably link **human health** and **environmental sustainability**. The scientific targets for healthy diets and sustainable food systems are integrated into a common framework, which should be universal for all food cultures and production systems in the world, with a high potential for local adaptation and scalability.

Food is also one of the **main human motivator**, and its **hedonic quality** has the power to drive many of our everyday activities.

The brain, which represents 2% of our body weight, consumes about 20% of the calories we eat each day and the quality of the food affects **brain development and functions** and the onset of **neurological and psychiatric disorders**.

Nutraceuticals are also emerging strategies to prevent and treat brain disorders.

All these topics will be explored and top level international scientists will cover the most recent data in each field. Young scientists are also invited to submit their contributions, which will be selected for oral communications in the main sessions and for poster presentations.

Food for mankind: health and sustainability - Cognitive and clinical neuroscience of food oriented behaviour and obesity - Food, nutraceuticals and prevention of neuropsychiatric diseases will be the major topics treated in these three days, hopefully stimulating and with large participation of a multidisciplinary attendance from physicians, biologists, psychologists and food experts.

Key-words:

Nutrition, Diet, Microbiota, Nutraceuticals, Food oriented behavior, Obesity, Cognitive decline, Cognitive enhancers, Parkinson's disease, Alzheimer's disease, Inflammaging, Multiple Sclerosis, Neuroinflammation, Anorexia nervosa, Eating disorders, Epigenetics.



PROGRAMME

Wednesday, 20 November

- 10.00 13.00 Annual Meeting of Milan Center for Neuroscience Selected oral and poster presentation from NeuroMi members on all research areas of the Center. Non members are also welcome
- 13.00 14.30 Lunch and poster discussion
- 14.30 15.00 Inauguration

Giovanna Iannantuoni, Rector of University of Milano-Bicocca Carlo Ferrarese, Scientific Director, Milan Center for Neuroscience Massimo Labra, Scientific Director, Best4Food Monica Di Luca, President, European Brain Council

FIRST SCIENTIFIC SESSION

Food for mankind: health and sustainability

Chair: Massimo Labra and Paola Palestini

- 15.00 Latest trends in nutrition for health Hellas Cena (Pavia, Italy)
- 15.30 Periconceptional parental dietary patterns and the impact on the earliest prenatal development of the child Régine P. M. Steegers-Theunissen (Rotterdam, The Netherlands)
- **16.00** Multisensory perception of food: quality, health and sustainability Alberto Gallace (Milan, Italy)
- 16.30 Coffee break
- 17.00 The microbiota in gut-liver-brain axis Maria Rescigno (Milan, Italy)
- **17.30** Nutrition and nutraceuticals for brain health Paolo Magni (Milan, Italy)
- 18.00 Selected oral communications on the topic



Thursday, 21 November

Cognitive and clinical neuroscience of food oriented behaviour and obesity

MORNING SESSION

Chair: Giuseppe Vallar and Nadia Bolognini

- 09.15 The taste experience Barry Smith (London, UK)
- 10.00 The psychology of food stimuli processing Raffaella I. Rumiati (Trieste, Italy)
- 10.45 Coffee break
- **11.15** Implicit and explicit attitudes towards food Marco Perugini (Milan, Italy)
- **12.00 Regulation of food related behaviour: Nudging or Boosting?** J. Armando Perez-Cueto (Copenhagen, Denmark)
- **12.45** The functional neuroanatomy of food oriented behaviour and obesity in humans Eraldo Paulesu (Milan, Italy)
- 13.30 Lunch and Poster View

AFTERNOON SESSION

Chair: Eraldo Paulesu and Fabio Madeddu

- 14.30 Selected oral communications
- 15.30 Coffee break
- 16.00 Neurostimulation in obesity Thomas Frank Münte (Lübeck, Germany)
- 16.45 Pharmacology of obesity: recent developments Livio Luzi, (Milan, Italy)
- 17.30 The incentive sensitization model of obesity Ken Berridge (Ann Arbor, MI, USA)

18.15 General discussion



Friday, 22 November

Food, nutraceuticals and prevention of neuropsychiatric diseases

MORNING SESSION

Chair: Carlo Ferrarese and Massimo Musicco

- 09.00 Diet and prevention of cognitive decline Jayne Woodside (Belfast, UK)
- **09.30 Environmental causes of Parkinson's disease: focus on the gut-brain axis** Roberto Cilia (Milan, Italy)
- 10.00 Is medical nutrition the only option left in prodromic Alzheimer's Disease? The LipiDiDiet Roberto Pisati (Italy & Greece)
- **10.30 Nutraceuticals in neurodegenerative diseases** Giovanni Scapagnini (Campobasso, Italy)
- 11.00 Coffee break
- 11.30 Diet and inflammagin Mario Clerici (Milan, Italy)
- 12.00 Dietary patterns, cognition, and brain aging: experience from European cohort studies" Federica Prinelli (Stockholm, Sweden)
- 12.30 From dietary habits to multiple sclerosis and other neuroinflammatory diseases: a matter of barriers Paolo Riccio (Potenza, Italy)
- 13.00 Lunch

AFTERNOON SESSION

Chair: Massimo Clerici and Renata Nacinovich

- **14.00** Selected oral communications
- 15.30 Coffee break
- 16.00 TBD Nadia Micali (Geneva, Switzerland)
- 16.30 Bridging neuroscience and neuroimaging research in clinical practice in anorexia nervosa - Angela Favaro (Padua, Italy)
- 17.00 Taste and reward processing in eating disorders Umberto Volpe (Salerno, Italy)
- 17.30 Food and methylation potential: an epigenetic approach to anorexia nervosa and other psychiatric disorders Lucio Tremolizzo (Monza, Italy)
- **17.50 Mentalization in adolescents with anorexia nervosa and in their parents** Renata Nacinovich (Monza, Italy)
- 18.10 General discussion Discussants: Renata Nacinovich, Marina Saresella
- **18.30** Symposium closing remarks



FACULTY

BERRIDGE KEN

Dept. of Psychology, University of Michigan, Ann Arbor, MI, USA

BOLOGNINI NADIA

Dept. of Psychology, University of Milano-Bicocca, Milan; IRCCS Istituto Auxologico Italiano, Milan, Italy

CENA HELLAS

Dept. of Public Health, Experimental and Forensic Medicine, Dietetics and Clinical Nutrition Laboratory, University of Pavia, Pavia; Clinical Nutrition and Dietetics Service, Unit of Internal Medicine and Endocrinology, ICS Maugeri IRCCS, Pavia, Italy

CILIA ROBERTO

Parkinson Institute, ASST Gaetano Pini-CTO, Milan, Italy

CLERICI MARIO

Dept. of Pathophysiology and Transplantation, University of Milan; SM Nascente Scientific Institute, IRCCS and Don C. Gnocchi Foundation, Milan, Italy

CLERICI MASSIMO

School of Medicine and Surgery, University of Milano-Bicocca, Monza, Italy

DI LUCA MONICA

Dept. of Pharmacological and Biomolecular Sciences, University of Milan, Milan, Italy

FAVARO ANGELA

Dept. of Neuroscience, Psychiatry Unit, University of Padua, Padua, Italy

FERRARESE CARLO

School of Medicine and Surgery, University of Milano-Bicocca; Dept. of Neurology, San Gerardo Hospital, Monza, Italy

GALLACE ALBERTO

Dept. of Psychology, Best4Food, NeuroMI, University of Milano-Bicocca, Milan, Italy

IANNANTUONI GIOVANNA

Dept. of Economics, Management and Statistics, University of Milano-Bicocca, Milan, Italy

LABRA MASSIMO

Zooplantlab, Dept. of Biotechnology and Biosciences, University of Milano-Bicocca, Milan, Italy

LUZI LIVIO

Dept. of Endocrinology and Metabolism, IRCCS Policlinico San Donato, San Donato Milanese; Dept. of Biomedical Sciences for Health, University of Milan, Milan, Italy

MADEDDU FABIO

Dept. of Psychology, University of Milano-Bicocca, Milan, Italy

MAGNI PAOLO

Dept. of Pharmacological and Biomolecular Sciences, University of Milan, Milan, Italy

MICALI NADIA

Dept. of Psychiatry, University of Geneva, Geneva, Switzerland; Dept. of Pediatrics, Gynecology and Obstetrics, University of Geneva, Geneva, Switzerland; Great Ormond Street Institute of Child Health, University College London, London, UK)

MUNTE THOMAS FRANK

Dept. of Neurology, University Hospital Lübeck, Lübeck, Germany

MUSICCO MASSIMO

Epidemiology Unit, Institute of Biomedical Technologies-National Research Council, Segrate (MI), Italy

NACINOVICH RENATA

School of Medicine and Surgery, University of Milano-Bicocca; Dept. of Child and Adolescent Mental Health, San Gerardo Hospital, Monza, Italy



PALESTINI PAOLA

School of Medicine and Surgery, University of Milano-Bicocca, Monza, Italy

PAULESU ERALDO

Dept. of Psychology, University of Milano-Bicocca, Milan; fMRI Unit-IRCCS Galeazzi, Milan, Italy

PEREZ-CUETO J. ARMANDO

Dept. of Food Science, Faculty of Science, University of Copenhagen, Denmark

PERUGINI MARCO

Dept. of Psychology, University of Milano-Bicocca, Italy

PISATI ROBERTO

Medical Director Nutricia Italy & Greece

PRINELLI FEDERICA

Epidemiology Unit, Institute of Biomedical Technologies-National Research Council, Italy; Aging Research Center, Department of Neurobiology, Care Sciences and Society, Karolinska Institute and Stockholm University, Sweden

RESCIGNO MARIA

Humanitas University, Mucosal Immunology and Microbiota Unit, Milan, Italy

RICCIO PAOLO

Dept. of Sciences, University of Basilicata, Potenza, Italy

RUMIATI RAFFAELLA

International School for Advanced Studies, SISSA-ISAS, Trieste, Italy

SARESELLA MARINA

Don Gnocchi Foundation, IRCCS, Milan, Italy

SCAPAGNINI GIOVANNI

Dept. of Medicine and Health Sciences "V. Tiberio", University of Molise, Campobasso, Italy

SMITH BARRY

School of Advanced Study, University of London, London, UK

STEEGERS-THEUNISSEN RÉGINE PM

Dept. of Obstetrics and Gynaecology, Erasmus MC, University Medical Centre, Rotterdam, the Netherlands

TREMOLIZZO LUCIO

School of Medicine and Surgery, University of Milano-Bicocca; Dept. of Neurology, San Gerardo Hospital, Monza, Italy

VALLAR GIUSEPPE

Dept. of Psychology, University of Milano-Bicocca, Milan; IRCCS Istituto Auxologico Italiano, Milan, Italy

VOLPE UMBERTO

Dept. of Mental Health, University of Campania "L. Vanvitelli", Naples, Italy

WOODSIDE JAYNE

Centre for Public Health, Queen's University Belfast, Belfast, UK; UK Clinical Research Collaboration, Centre of Excellence for Public Health, Queen's University Belfast, Belfast, UK



ECM for italian participants only

Evento n. 1386 -272768

Il Simposio è stato accreditato nel **Programma Nazionale ECM Agenas** per **200** partecipanti.

Sono stati assegnati: n. 11,2 crediti

Obiettivo formativo: Applicazione nella pratica quotidiana dei principi e delle procedure dell'evidence based practice (EBM - EBN - EBP)

Professioni accreditate:

- Biologo
- Dietista
- Farmacista specializzato in:
- Farmacia Ospedaliera; Farmacia Territoriale
- Infermiere e infermiere pediatrico
- Medico specializzato in: Biochimica Clinica; Endocrinologia; Farmacologia e Tossicologia Clinica; Geriatria; Igiene Degli Alimenti e Della Nutrizione; Malattie Metaboliche e Diabetologia; Medicina Generale (Medici Di Famiglia); Medicina Interna; Neurologia; Neuropsichiatria Infantile; Pediatria; Pediatria (Pediatri di libera scelta); Psichiatria; Psicoterapia; Scienza Dell'alimentazione e Dietetica.
- Psicologo specializzato in: Psicologia; Psicoterapia

I crediti verranno assegnati solo a chi avrà completato il 90% del percorso formativo, frequentando tutte le sessioni (firme entrata/uscita) e restituendo il questionario di apprendimento compilato correttamente.

Gli **attestati** riportanti i crediti ECM saranno spediti dopo la verifica del completamento del percorso formativo via mail dal Provider.

Organizing Secretariat the office

via San Nicolò 14 - 34121 Trieste ph. 040368343 ext. 1 + 11 / ext 1 + 15 fax 040368808 what's app. 338 3387091 e-mail: neuromi19@theoffice.it; neuromi19registration@theoffice.it