

# Fifth International Meeting **FOOD FOR BRAIN: promoting health and preventing diseases**

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**20-22 November, 2019**

## **Presidents of the Symposium**

Carlo Ferrarese, Massimo Labra, Paola Palestini, Eraldo Paulesu,  
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## **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](http://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 Periconceptual 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 Bridging neuroscience and neuroimaging research in clinical practice in anorexia nervosa** - Angela Favaro (Padua, Italy)
- 16.30 Taste and reward processing in eating disorders** - Umberto Volpe (Salerno, Italy) and Palmiero Monteleone (Dept. of Medicine, Surgery and Dentistry 'Scuola Medica Salernitana', Section of Neurosciences, University of Salerno, Salerno, Italy)
- 17.00 Food and methylation potential: an epigenetic approach to anorexia nervosa and other psychiatric disorders** - Lucio Tremolizzo (Monza, Italy)
- 17.30 Mentalization in adolescents with anorexia nervosa and in their parents –**  
*Renata Nacinovich (Monza, Italy)*
- 18.00** General discussion  
Discussants: Renata Nacinovich, Marina Saresella
- 18.30** Symposium closing remarks

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