NeuroMI
MILAN CENTER FOR NEUROSCIENCE

UNIVERSITÀ DEGLI STUDI DI MILANO BICOCCA

NeuroMI 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

UNIVERSITÀ DEGLI STUDI DI MILANO BICOCCA BEST4FOOD

Consiglio Nazionale delle Ricerche

Fondazione Don Carlo Gnocchi Onlus

NeuroMI 2019

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

www.theoffice.it/neuromi19

20-22 November, 2019

Presidents of the Symposium

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

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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) 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 **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

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

MONTELEONE PALMIERO
Dept. of Medicine, Surgery and Dentistry 'Scuola Medica Salernitana', Section of Neurosciences, University of Salerno, Salerno, Italy

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

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