### https://nutrigenomics.unicam.it/



## 5<sup>th</sup> EUROPEAN SUMMER SCHOOL ON

# URGENOMICS

Senigallia Italy 18<sup>th</sup> - 21<sup>th</sup> June 2024 Hotel City

## NUTRITIONAL EPIGENETICS AS A NEW STRATEGY FOR LONG AND HEALTHY LIFE TO HUMANS AND ENVIRONMENT

The Summer School is open to students and researchers interested in nutritional epigenetics. Starting from an introduction to the discipline, the summer school will offer an update on new evidence on the complex link among early life exposures, epigenetics, microbiota and nutrition

#### **18 June 2024**14:30-18:30

- 14:00 Registration
- 15:00 Welcome Chairs: **Rosita Gabbianelli** and **Michael Muller** 1.Introduction to nutri-epigenomics: new discoveries for healthy life
- 15:15 Wim Vanden Berghe, *Mitochondrial*) Metabolism versus

#### **19 June 2024** 9:00 - 18:30

#### Chairs: **Wim Vanden Berghe** and **Carsten Carlberg** 2. Environmental epigenetics: from early life to aging

9:00 **Torsten Plosch**, *Early programming by an adverse environment - from mouse models to first human data*, Dept. Obstetrics and Gynaecology, Groningen, The Netherland

#### **20 June 2024** 9:00 - 17.00

#### Chairs: **Carlos Guerrero Bosagna** and **Torsten Plosch 3.Nutrigenomics and gut microbiota**

9:00 **Michael Müller**, *The impact of nutrition and the role of the gut microbiota for the gutbrain axis*, University of East Anglia, Norwich, United Kingdom

#### **21 June 2024** 9:00-12:15

#### Chairs: **Melita Vidakovic** and **Laura Bordoni** 4.Nutrigenomics in longitudinal large-scale studies

9:00 **Carsten Carlberg**, *In vivo responses to vitamin D: impact of the response index*, Institute of Animal Reproduction and Food Research, Polish Academy of Sciences in Olsztyn, Olsztyn,

- *nutriepigenome: chicken or egg?*, Department of Biomedical Sciences, University Antwerp, Belgium
- 16:00 **Melita Vidakovic**, *Nutri-epigenomics: Lessons Learned, Limitations Defined and Perspectives to be setup*, Institute for Biological Research, Belgrade, Serbia
- 16:45 Coffee break Selected oral talks
- 17:15 **Maria Inês Farrim**, *The Role of (Poly)phenols in Managing Diabetes: Understanding their Effects and Mechanisms of Action*, Universidade Lusófona's Research Center for Biosciences & Health Technologies, Lisboa, Portugal
- 17:40 **Ranjini Ghosh**, *Vitamin D-Mediated Modulation of Innate Immunity in Healthy Individuals: Insights from an In Vivo Study*, Dastidar Institute of Animal Reproduction & Food Research, Polish Academy of Sciences, Olsztyn, Poland Short talks
- 18:05 **García-Aranda Alba**, *Grape Seed Proanthocyanidin Extract* (*GSPE*) is able to resynchronize circadian hormones in plasma, Nutrigenomics Research Group, Department of Biochemistry and Biotechnology, Universitat Rovira i Virgili,Tarragona, Spain
- 19:00 Welcome party and networking at Scalo Zero Pizzeria
- 9.45 **Louise Harvey**, *Fueling the future: Nutritional Programming of Later Life Health*, Nutrition Metabolism and Functional Nutrients Medical and Nutritional Science, Nutricia Research, Utrecht, Netherlands
- 10:30 Coffee break Selected oral talks
- 11:00 **Evelien Van Dijck**, *Identification of prognostic DNA methylation changes in metabolic dysfunction associated steatotic liver disease*, University of Antwerp Center of Medical Genetics, Belgium
- 11:25 **Yuen Jian Cheong**, *Nuclear-specific propionyl-Coenzyme A metabolism regulates histone propionylation*, Epigenetics and Signalling programme, Babraham Insitute, Cambridge, United Kingdom. Short talks
- 11:50 **Sun Peixin**, *Partial replacement of maltodextrin with galactose in a post-weaning diet improves body composition and energy metabolism in early life in a mouse model*, Human and Animal Physiology, Wageningen University and Research, The Netherlands
- 12:00 **Fatemeh Mansouri**, *The effects of non-soy legume consumption on serum levels of inflammatory biomarkers and Adiponectin in overweight/obese adults: a systematic review and meta-analysis of Randomised Controlled Trials*, School of Advanced Studies, University of Camerino, Italy
- 12:10 **Gaia de Simone**, *Investigating the nutrigenomic and antiinflammatory properties of cioccorito chickpeas in an intestinal epithelium model*, School of Advanced Studies, University of Camerino, Italy
- 12:20 **Marco Rendine**, *Impact of quercetin metabolites on glucose and lipid metabolism in mature adipocytes*, Division of Human Nutrition, Department of Food, Environmental and Nutritional Sciences (DeFENS), University of Milano, Italy
- 12:30 Lunch at Hotel City
- 15:00 **Carlos Guerrero Bosagna**, *Metabolic and Reproductive Diseases: Role of Early Life Exposures and Epigenetic Changes*, Department of Organismal Biology, Physiology and Environmental Toxicology, Uppsala University, Uppsala, Sweden
- 15:45 **Ferdinand Von Meyenn**, *Reading health and nutrition history in the epigenome*, Laboratory of Nutrition and Metabolic Epigenetics, Institute for Food, Nutrition and Health, Department of Health Sciences and Technology, ETH Zurich, Zurich, Switzerland
- 16:30 Coffee break Selected oral talks
- 17.30 **Sara Villa**, *In vitro study of the effect of LA9498, a novel HDAC3 inhibitor, on adipocyte and macrophage phenotype*, Dipartimento di Scienze Farmacologiche e Biomolecolari, University of Milano, Italy 17.55-18.20 Effect of methylglyoxal on intestinal cells: possible molecular mechanisms, Camilla Morresi, Department of Life and Environmental Sciences (DISVA), UNIVPM, Ancona, Italy

- 9:45 Ina Bergheim, Nutrition, intestinal microbiota and barrier as modulators of the development of liver diseases, Department of Nutritional Sciences, University of Vienna, Austria
- 10:30 Coffee break
- 11:00 Group Photo Selected oral talks
- 11:15 **Salma Hayder Ahmed**, *Diet interaction with gut & vaginal microbiome profiling on blastocysts formation*, Translational Medicine Department, Research Department, Sidra Medicine, Doha, Qatar Short talks
- 11:40 **Alessia Bartolacci**, *Effect of a lifestyle intervention on glucose, diet, and gut microbial composition in postmenopausal women with previous breast cancer*, Department of Biomolecular Science, University of Urbino Carlo Bo, Italy
- 11:50 **Jiemin Fan**, *The role of gut microbial metabolites in mediating the heterogeneity of effects of dietary fibre on markers of colorectal cancer risk*, Human Nutrition & Exercise Research Centre, Faculty of Medicine Sciences, Population Health Sciences Institute, Newcastle University, UK
- 12:00 **Giulia Feliziani**, *Effect of TMA excess on intestinal barrier functions*, School of Advanced Studies, University of Camerino, Italy
- 12:10 **Lotti Tajouri**, *Using Mobile Phones while Eating or Preparing Food: recipe for microbial contamination*, Bond University, Gold Coast, Australia.
- 12:30 Lunch at Hotel City
- 14:45 **Omry Koren**, *The role of the microbiome in the first 1000 days of life*, Azrieli Faculty of Medicine, Bar-Ilan University, Safed, Israel Selected oral talks
- 15:30 **Giorgia Sarti**, *A preclinical study on the role of prebiotic and probiotic administration in preventing beta-amyloid deposition in the brain of Alzheimer' Disease transgenic mice*, University of Florence, Italy
- 15:55 **Ozge Onluturk Aydogan**, *Revealing the Association of Microbiome and Patient Genetic Profiles in Obesity for Innovative Nutritional Supplements and Recommendations*, Department of Bioengineering, Faculty of Engineering, Marmara University, Turkey
- 16:20 Coffee break
- 17:00 Visit to the Casalfarneto winery and social dinner

- Poland Short talks
- 9:45 **Anna Koscielak**, *Comparison of the effect of nucleic acids isolated from raw and fried meat products on cells of the human digestive tract in vitro*, Technology and Biotechnology of Food, Faculty of Chemistry, Gdańsk University of Technology, Poland
- 9:55 Arianna Caprodossi, *Phyto-chemical analysis of the different populations of Sicilian Sumac (Rhus coriaria L.)*, Chemistry Interdisciplinary Project (Chip), School of Pharmacy, University of Camerino, Italy
- 10:05 **Maria-Flavia Mareși**, *Determinants of food choices: implications on health status*, "Iuliu Hatieganu" University of Medicine and Pharmacy, Cluj-Napoca, Romania
- 10:15 Coffee break and reviewers' board meeting
- 11:00 **Valentina Domingues**, *Endocrine disruptors and food safety-a temporal perspective*, REQUIMTE/LAQV, ISEP, Polytechnic of Porto, Portugal.
- 11:45 Best oral and best short talk awards
- 12.00 Farewell







