

IMPACT OF NUTRITION DURING DIFFERENT LIFE STAGES – TRACING THE IMPACT OF DIET ON HUMAN HEALTH

NUGOweek 2023, September 5-8, 2023
La Rotonda, Piazzale della Libertà, 23, Senigallia (AN)

5 September 2023 – 14:30-18:00

14:45 Welcome

15:00-18:00

Chairs: Guy Vergeres and Yiannis Mavrommatis

1. Early biomarkers of disease: What is new?

15:00-15:40 *The importance of adequate nutrition and of the intestinal microbiota in the balance between health and disease early in life: the celiac disease paradigm, Alessio Fasano, Massachusetts General Hospital, Boston, MA, USA*

15:40-16:10 Coffee break

16:10-16:50 *The power of precision nutrition – opportunities for assessing and predicting individual response, Baukje de Roos, Rowett Institute, University of Aberdeen, Foresterhill, Aberdeen, UK*

16:50-17:10 *The associations between metabolomic responses to a liquid mixed meal and incidence of type 2 diabetes: are there novel biomarkers beyond glucose and triglyceride response? Ruifang Li-Gao, Department of Clinical Epidemiology, Leiden University Medical Center, Leiden, NL*

17:10- 17:30 *A multimodal AI approach to achieve optimal vitamin D status through personalized lifestyle interventions in healthy adults, Ion Rezola, Department of Product, Genomcore-Made of Genes, ES*

17:30-17:45 New NuGO Members

18:30 Welcome party and networking at Hotel Raffaello -Terrazza Morandi

21:00 Cultural event, Senigallia by night: guided visit of Senigallia

6 September 2023 – 9:00 -12:30

Chairs: Michael Muller and Rosita Gabbianelli

2. Nutrition along life: learning from the exposome

9:00-9:40 *The planetary health diet and its impact on the gut-brain axis during aging, David Vauzour, Department of Nutrition, Norwich Medical School, University of East Anglia, Norwich, UK*

9.40-10.20 *Multi-omics responses to nutritional challenges and lifestyle interventions, Marian Beekman, Molecular Epidemiology, Department of Biomedical Data Sciences, Leiden University Medical Center, Leiden, NL.*

10:20-10:50 Coffee break

10:50-11:10 *Impact of plant-based diet indexes on the metabolomic profile*, **Elaine Hillesheim**, UCD Institute of Food and Health, UCD School of Agriculture and Food Science, University College Dublin, IE

11:10-12:15 Poster session

12:30 Lunch at Hotel Raffaello

14:00-15:00 Poster session

15:00 - 18:00

Chairs: *Laura Bordoni and Lydia Afman*

3. Tools to trace the impact of nutrition and lifestyle on health

15:00-15:40 *Personalised Nutrition for metabolic health*, **Sarah Berry**, Department of Nutrition, King's College London, London, UK

15:40-16:20 *Use of transcriptomics and metabolomics to trace the impact of dietary fat on CVD risk*, **Stine Ulven**, Department of Nutrition, Institute of Basic Medical Sciences, University of Oslo, Oslo, NO

16:20-16:50 Coffee break

17.30 ECN Network event

7 September 2023 – 9:00 -12:30

Chairs: *Laura Bordoni and Lydia Afman*

4. Strategies to “rejuvenate” organs

9:00-9.40 *Epigenetic clocks - measuring and predicting our (future) health*, **Ferdinand von Meyenn**, Laboratory of Nutrition and Metabolic Epigenetics, Institute for Food, Nutrition and Health, Department of Health Sciences and Technology, ETH Zurich, Zurich, CH

9:40-10:20 *Regulation of skeletal muscle insulin sensitivity*, **Anna Krook**, Department of Physiology and Pharmacology, Integrative Physiology, Karolinska Institutet, Stockholm, SE

10:20-10:50 Coffee break

10:50-11:10 *Altered placental and cord blood DNA methylation patterns associated with Gestational Diabetes Mellitus in marginalized Burman and Karen populations on the Thailand-Myanmar border: Is there a role for diet?* **Fatima Ahmad**, Maternal and Child Health Department, Sidra Medicine, Doha, Q.

11:10-11:30 *Tissue-specific insulin resistance phenotype-diet interactions in fasting and postprandial metabolite responses to a 12-week high-MUFA or low-fat, high-protein, high-fibre diet: a secondary analysis of the PERSON study*, **Anouk Gijbels**, Division of Human Nutrition and Health, Wageningen University, Wageningen, NL

11:30 Group Photo

11:45 -12:15 Poster session

12:30 Lunch at Hotel Raffaello

14:00 -15:00 Poster session

15:00-17:00

Chairs: Michael Muller and Rosita Gabbianelli

5. Nutrigenomics in the control of low-grade inflammation

15:00-15:40 *Nutrigenetic and Nutrimetabolomic Analyses of Proinflammatory Dietary Patterns and Cardiometabolic Health*, **Frank B Hu**, Departments of Nutrition and Epidemiology, Harvard T.H. Chan School of Public Health; Division of Network Medicine, Brigham and Women's Hospital and Harvard Medical School, Boston, MA, USA

15:40-16:00 *In search of biomarkers: mapping the effects of plant-based proteins on human metabolic profiling*, **Samira Prado**, School of Medical Sciences, Faculty of Medicine and Health, Örebro University, Örebro, SE

16:00-16:20 *Factors that influence intention to use gene-based personalised diet and physical activity advice in young adults that perceive themselves to be a healthy weight versus overweight or obese*, **Alexandra King**, Faculty of Sport, Allied Health, and Performance Science, St Mary's University, Twickenham, UK

16:20-16:50 Coffee break

17:00 Visit to the Casalfarneto winery and social dinner

8 September 2023 – 9:00-12:30

Chairs: Baukje de Roos and John Mathers

6. Social and gender inequalities drive unhealthy outcomes

9:00-9:40- *External Social Forces That Drive Unhealthy Dietary Choices*, **Alice H Lichtenstein**, Cardiovascular Nutrition Laboratory, Jean Mayer USDA Human Nutrition Research Center, Tufts University, Boston, MA, USA

9:40-10:20 *Sex and gender inequalities in cardiovascular risk across ethnic groups*, **Irene G Van Valkengoed**, Department of Public and Occupational Health, Section Ethnicity, Gender and Health, Amsterdam UMC, NL

10:20-10:50 Coffee break

10:50-11:00 NuGO Best oral presentation and Best Poster award

11:10-11:20 ECN promotion

11:20-11:30 NuGOweek 2024 Announcement

11:15 Farewell