



# Food metabolites and the impact of microbiota workshop

## Preliminary program

**30th September 2019**

9:00: Welcome

9:30 – 10:15: Lecture 1: **Interactions of the gut microbiota with dietary compounds**

*(David Berry, Centre for Microbiology and Environmental Systems Science, University of Vienna)*

10:15 – 10:45: Lecture 2: **Polyphenols bioactivity: the role of microbiota.**

*(Ana Faria, NOVA Medical School, Faculdade de Ciências Médicas, Universidade Nova de Lisboa)*

10:45 – 11:00: Coffee break

11:00 – 13:00: **Practical classes:** 16S rRNA gene sequencing data analysis

13:00 – 14:30 Lunch

14:30 – 15:30: Lecture 3: ***In vitro* gut microbiome biotransformation models.**

*(Olivier Mortelé, University of Antwerp, Belgium)*

15:30 – 16:00: Lecture 4: ***High resolution LC-MS analysis using suspect and non-targeted screening workflows to identify colonic metabolites.***

*(Philippe Vervliet, University of Antwerp, Belgium)*

16:30 – 16:45: Coffee break

16:45 – 18:30: **Practical classes:** Colonic metabolite identification by non-targeted screening.

19: Dinner

## Trainers

### **David Berry**

*Department of Microbiology and Ecosystem Science, University of Vienna, Austria*

David Berry graduated in 2005 in Bio-resource Engineering at Rutgers University. After that he did a Masters and in 2009 he completed a PhD in Environmental Engineering at the University of Michigan, USA. In the same year, he changed continents and became a post-doc at the University of Vienna, Austria, where he became an Assistant Professor in 2012, an Associate Professor in 2016, and a Full Professor in 2018 at the Department of Microbiology and Ecosystem Science. Throughout the years, David Berry's research has focused on the role of gut microbiota in health and disease, in the development of new tools to study uncultivated microorganisms in their natural environment, and the study of microbial communities using co-occurrence interactions networks. He is currently the Managing Director of the Joint Microbiome Facility of the Medical University of Vienna and the University of Vienna, which supports clinical and environmental microbiome research and develops new sequence-based approaches to characterize microbial communities.

### **Ana Faria**

*CEDOC, NOVA Medical School | Faculdade de Ciências Médicas, Universidade NOVA de Lisboa, Portugal*

Ana Faria graduated in 2003 in Biochemistry, after which she did a Master and a PhD in Chemistry, finishing in 2010, in the Faculdade de Ciências da Universidade do Porto, Portugal. She continued her research as a post-doc in the Faculdade de Medicina da Universidade do Porto. She collaborated with the Faculdade de Ciências da Nutrição e Alimentação da Universidade do Porto since 2009 and in 2016 she became an Invited Assistant Professor in Nova Medical School, Lisbon. She is member of the Comprehensive Health Research Centre and also collaborates at CINTESIS - Center for Health Technology and Services Research, with ProNutri Group. Her research mainly focuses on the mechanisms, causes and effects of nutrients in health and disease.

### **Olivier Mortelé**

*University of Antwerp, Belgium*

Olivier Mortelé graduated in 2016 in Pharmaceutical Sciences, Drug Development. After his graduation he started his PhD in Pharmaceutical Sciences at NatuRA Research Group and the Toxicological Centre of the University of Antwerp. His PhD research involves the study of the microbiotic biotransformations of different xenobiotics by using an *in vitro* gastrointestinal dialysis model with colon-stage (GIDM-Colon). This research involves working on high resolution mass spectrometry instruments. Furthermore Olivier is enrolled for the course of Clinical Biochemistry at the University of Antwerp. In 2017 Olivier had a secondment at the RECETOX Centre in Brno (Masaryk University) where he obtained much experience in non-targeted screening of human urine and plasma samples using GC- and LC-Orbitrap instruments. Over the past years, Olivier followed multiple seminars on mass spectrometry and comprehensive data-analysis workflows.

### **Philippe Vervliet**

*University of Antwerp, Belgium*

Philippe Vervliet graduated in 2013 from the University of Antwerp (Belgium) as a master in Pharmaceutical Sciences, Drug Development. After his graduation he started working in a private company specialized in software development for health practitioners after which he returned to the

University of Antwerp to start his PhD at the Toxicological Centre in 2016. His research to the fate of new composite materials in dental restorations involves working on high resolution mass spectrometry instruments. He collaborates in various projects to establish suspect and non-target screening workflows for environmental samples and has participated in multiple seminars focused on high resolution mass spectrometry.

## Prices

### **Workshop on Food Metabolites and the Impact of Microbiota**

- General: 35 €
- Reduced rate: 30 €

### **Workshop on Food Metabolites and the Impact of Microbiota + Workshop on Cell Migration**

- General: 100 €
- Reduced rate: 90 €

#### **Notes:**

The fee includes attendance to lectures, laboratory classes, and coffee-breaks.

The reduced rate applies to students, teachers and researchers from University Lusófona and from Nova University

Fees do not apply to NutRedOx members attending the training school in Molecular Nutrition.