



## The 6<sup>th</sup> Nutrition Winter School

### *Diet and Microbes: Gut health for the brain and body*

**27.1. – 31.1.2020, Levi, Lapland, Finland**

#### **Monday, January 27**

**12:00 - 15:00**

Seminar registration is open at the Levi Hotel Spa

#### **SESSION 1: INTRODUCTION**

**15:00 - 15:20**

Opening words - Welcome to Nutrition Winter School 2020  
*Nutrition Winter School 2018 Organizing Committee*

**15:20 - 16:10**

Introduction into the current landscape of gut health research  
*Prof. Karl-Heinz Herzig, University of Oulu, Finland*

**16:10 – 17:00**

Our Microbes Inside: What Do We Know Now?  
*Prof. Willem de Vos, University of Helsinki, Finland, and Wageningen University, the Netherlands*

**17:00 - 18:00**

Snap presentations  
*All seminar participants*

#### **EVENING PROGRAM**

**18:00**

Dinner at the Conference Hotel

**19:00**

Tour de Levi



## **Tuesday, January 28**

### **SESSION 2: GUT HEALTH AND GASTROINTESTINAL DISEASES**

**09:00 - 9:50**

The role of diet in gastrointestinal diseases

*Prof. Robert-Jan Brummer, Örebro University, Sweden*

**9:50 – 10:05**

***Short presentation:***

Effects of butyrate on colonic barrier function in subjects with irritable bowel syndrome and in healthy subjects

*Mathias Tabat, Örebro University, Sweden*

**COFFEE BREAK**

**10:15 – 11:05**

The gut microbiota in gastrointestinal diseases

*Dr Jonna Jalanka, University of Helsinki, Finland*

**11:05 – 11:20**

***Short presentation:***

Transient relief of symptoms with a single fecal transplantation in irritable bowel syndrome: a placebo-controlled trial

*Perttu Lahtinen, University of Helsinki, Finland*

**11:20 - 11:35**

***Short presentation:***

The role of human gut microbiota in carcinogenesis of gastrointestinal cancers

*Karolina Kaźmierczak-Siedlecka, Medical University of Gdansk, Poland*

**11:35 – 12:00**

### **POSTER SESSION 1**

Snap poster presentations from the participants

*Dr Cristina Torres Fuentes, University Rovira i Virgili, Spain*

*Dr Ghulam Shere Raza, University of Oulu, Finland*

*Daniela Graf, Max Rubner-Institute, Germany*

*Dr Kathryn Burton, Agroscope*

*Dr Manal Hemida, University of Helsinki*

*Hanna Launonen, University of Helsinki*

*Emma Kynkäänniemi, University of Helsinki*



*Laura Pirkola, Fazer / Swedish University of Agricultural Sciences, Sweden*

*Anne Geijssen, Wageningen University, the Netherlands*

*Dr Anne Salonen, University of Helsinki*

**12:00 - 15:00**

Lunch

Outdoor experience

**14:30 -**

Coffee and snack at the Conference venue

### **SESSION 3: GUT HEALTH IN NEUROLOGICAL DISEASES**

**15:00 - 15:50**

The gut microbiota in neurological diseases

*Dr Filip Scheperjans, University of Helsinki, Finland*

**15:50 – 16:05**

**Short presentation:**

Probiotics alter brain activity and stress response in healthy individuals

*Julia Rode, Örebro University, Sweden*

**16:05 - 16:55**

Diet and mental illness – Is there a role for gut microbiota?

*Dr Anu Ruusunen, University of Eastern Finland, Finland*

**16:55 – 17:10**

**Short presentation:**

The role of nutrition in serious mental illness

*Dr Scott Teasdale, University of New South Wales, Australia*

**17:10 - 17:25**

**Short presentation:**

The role of mucin glycans in the communication between the gut microbiota and the brain

*Erika Coletto, Quadram Institute Bioscience, UK*

**17:25 – 18:00**

### **POSTER SESSION 2**

Snap poster presentations from the participants

*Dr Sile Griffin, DuPont*

*Sohvi Lommi, Folkhälsan Research Center, Finland*



*Alessandro Atzeni, University Rovira i Virgili, Spain*  
*Margot De Spiegeleer, Ghent University, Belgium*  
*Elina Mäkinen, University of Jyväskylä, Finland*  
*Anastasiia Driuchina, University of Jyväskylä, Finland*  
*Verónica Arreaza Gil, University Rovira i Virgili, Spain*  
*Johanna Roponen, University of Eastern Finland, Finland*  
*Sanna Rajapolvi, Kuopio University Hospital, Finland*  
*Prof. Viktor Bielik, Comenius University, Slovakia*  
*Prof. Tanja Pessi, Tampere University, Finland*

## **EVENING PROGRAM**

**18:00**

Dinner at the Conference Hotel

**19:00**

Lappish Winter Olympic Games

## **Wednesday, January 29**

### **SESSION 4: GUT-HOST INTERACTIONS IN GUT HEALTH**

**09:00 - 09:50**

Enteric nervous system interactions in gut health  
*Prof. Michael Schemann, Technical University of Munich, Germany*

**9:50 – 10:05**

**Short presentation:**  
Phase II study of the efficacy of a low residue diet in mitochondrial disease  
*Dr David Houghton, Newcastle University, UK*

#### **COFFEE BREAK**

**10:15 - 11:05**

Microbiota-immune system interactions in gut health  
*Dr Claudia Burrello, Netherlands Cancer Institute, the Netherlands*

**11:05 – 11:20**

**Short presentation:**  
Cell type-specific effects of *Bifidobacterium breve* in the gut  
*Amanda Demeter, Earlham Institute, UK*



**11:20 – 11:35**

**Short presentation:**

Multi-biofluid Metabolomics as a Tool to Discover Metabolite Biomarkers for Cow's Milk Allergy  
*Ellen De Paepe, Ghent University, Belgium*

**11:35 - 12:00**

**MINISESSION: NEW COMMERCIAL SOLUTIONS FOR YOUR RESEARCH**

rRNA removal of host-bacterial samples for RNAseq experiments

*Dr Mattias Bergman, QIAGEN*

Measuring the energetic state of your cells with the Seahorse XF Analyzers

*Lasse Martlev, Seahorse XF Product Specialist, Agilent Technologies*

Comprehensive solutions for microbiome research from Immuno Diagnostic

*Dr Tuula Aaltonen, Immuno Diagnostic Oy*

**12:00 - 15:00**

Lunch

Outdoor Experience

**14:30 -**

Coffee and snack at the Conference venue

**SESSION 5: MICROBIOTA-GUT-BRAIN METABOLITES**

**15:00 - 15:50**

Gut-brain interaction and inflammation - is butyrate the culprit?

*Prof. Robert-Jan Brummer, Örebro University, Sweden*

**15:50 - 16:40**

Intestinal hormones in the gut-brain axis

*Dr Teemu Aitta-aho, University of Helsinki, Finland*

**16:40 - 16:55**

**Short presentation:**

Role of diet and microbiota in hepatic lipid metabolism and health

*Dr Karolin Weitkunat, German Institute of Human Nutrition Potsdam-Rehbruecke, Germany*



**16:55 – 17:10**

***Short presentation:***

Exploring the molecular effects of indole propionic acid, a gut derived metabolite in human SGBS cells

*Ratika Sehgal, University of Eastern Finland, Finland*

**17:10 – 18:00**

**POSTER SESSION 3**

Free discussions at the posters

*All participants presenting posters*

**EVENING PROGRAM**

**18:00**

Dinner at the Conference Hotel

**19:00**

Visit to Luvattu Maa – Levi Ice Gallery

**Thursday, January 30**

**SESSION 6: DIET AND GUT HEALTH**

**09:00 - 09:50**

Diet in functional GI disorders

*Prof. Magnus Simrén, University of Gothenburg, Sweden*

**09:50 – 10:05**

***Short presentation:***

Gluten challenge in patients with irritable bowel syndrome

*Joost Algea, University of Gothenburg, Sweden*

**COFFEE BREAK**

**10:10 - 11:00**

Lessons from the VASCaGe Research Centre - diet, gut and age-related diseases

*Prof. Stefan Kiechl, Medical University of Innsbruck, Austria*

**11:00 – 11:15**

***Short presentation:***

Probiotic functional foods based-diet for healthy ageing

*Chiara Salvesi, University of Camerino, Italy*



**11:15 - 11:45**

Gut health in metabolic diseases

*Prof. Eero Mervaala, University of Helsinki, Finland*

**11:45 – 12:00**

***Short presentation:***

Insulin resistance, metformin and the gut: the known, the uncertain and the future

*Dr Ove Eriksson, University of Helsinki*

**12:00 - 15:00**

Lunch

Outdoor Experience

**14:30 -**

Coffee and snack at the Conference venue

## **SESSION 7: NEXT STEPS IN GUT HEALTH RESEARCH**

**15:00 - 15:50**

Microbial vesicles

*Dr Justus Reunanen, University of Oulu, Finland*

**15:50 - 16:40**

Oral microbiome in health and disease

*Dr Milla Pietiäinen, University of Helsinki, Finland*

**16:40 - 17:30**

From the lab bench to the consumers – the future of gut health research in terms of commercialization

*Prof. Seppo Salminen, University of Turku, Finland*

**17:30 – 18:00**

Closing words

*Nutrition Winter School 2018 Organizing Committee*

## **EVENING PROGRAM**

**19:00**

Closing dinner at Kammi Lappish Restaurant



## **Friday, January 31**

### **WORKSHOPS**

**9:00 – 12:00**

Bioinformatics workshop

*Dr Matti Kankainen, University of Helsinki, Finland*

Writing workshop

*Dr Ewen MacDonald, University of Eastern Finland, Finland*

Graphics workshop

*Pasi Kainulainen, Mixtum*

**12:00 →**

Lunch

Nutrition Winter School After Ski