

THE 2ND INTERNATIONAL  
CONFERENCE ON  
**MICROBIOTA  
GUT BRAIN  
AXIS**

**MIND  
MOOD**

**MICROBES**

**17-18 JANUARY 2019  
AMSTERDAM  
THE NETHERLANDS**

CALL FOR  
POSTER  
ABSTRACTS

**WWW.MINDMOODMICROBES.ORG**

# MIND, MOOD & MICROBES

Increasing evidence from mostly preclinical studies indicates that the gut microbiome modulates brain development and function across the lifespan. This pinpoints the microbiota-gut-brain axis as a potential target for influencing mood and behaviour, such as anxiety and depression, as well as preventing or treating brain-related diseases, including Parkinson's disease, Alzheimer's disease, bipolar disorders and autism.

Currently, one of the biggest challenges is the translation of these insights into the clinical context. The first edition of **MIND, MOOD & MICROBES** in 2016 highlighted some challenges, such as limited suitable and clinically- relevant biomarkers, heterogeneous patient populations, and methodological discrepancies. A further complicating factor is that the fields of expertise involved are not closely related; microbial, neurological and psychiatric experts use different types of jargon, definitions and methodologies. To avoid overpromising of potential deliverables of this fascinating research field, it is essential that an interdisciplinary approach is stimulated.

**MIND, MOOD & MICROBES**, the 2nd International Conference on Microbiota-Gut-Brain Axis, will bring together academics, healthcare professionals, and industry partners from diverse and complimentary fields of expertise to accelerate the translation of research breakthroughs into professional and clinical practice.

## SCIENTIFIC ADVISORY COMMITTEE

- Dr Mauro Costa-Mattioli  
*Baylor College of Medicine, USA*
- Prof. John F. Cryan  
*University College Cork, Ireland*
- Dr Rochellys Diaz Heijtz  
*Karolinska Institutet, Sweden*
- Prof. Jane Foster  
*McMaster University, Canada*
- Dr Stéphanie-Anne Girard  
*Lallemand Health Solutions, Canada*
- Dr Saskia van Hemert  
*WinClove Probiotics, the Netherlands*
- Dr Elaine Hsiao,  
*University of California, Los Angeles (UCLA), USA*
- Prof. Michiel Kleerebezem  
*Wageningen University & Research, the Netherlands*
- Prof. Aletta Kraneveld  
*Utrecht University, the Netherlands*
- Prof. Marion Leboyer  
*University Paris Est Créteil, France*
- Dr Filip Schepers  
*University of Helsinki, Finland*
- Prof. Iris Sommer  
*University Medical Center Groningen, the Netherlands*

## CONFERENCE COMMITTEE

- Dr Eldin Jasarevic  
*University of Pennsylvania, USA*
- Drs Elsbeth Pekelharing  
*WinClove Probiotics, the Netherlands*
- Dr Laura Steenbergen  
*Leiden University, the Netherlands*

## INITIATING PARTNER



## DIAMOND SPONSOR



## GOLD SPONSORS



# PROGRAMME AT A GLANCE

## Thursday 17 January 2019

10:00 – 10:10	Opening of <b>MIND, MOOD &amp; MICROBES</b>
10:10 – 11:00	Keynote presentations
11:00 – 12:30	SESSION 1 The Microbiota-Gut-Brain Axis and Neurodevelopment
12:30 – 13:30	Lunch break & poster viewing
13:30 – 15:20	SESSION 2 The Microbiota-Gut-Brain Axis: a metabolic dialogue
15:20 – 15:45	Networking break & poster viewing
15:45 – 16:15	SESSION 3 Speed presentations (posters)
16:15 – 17:30	SESSION 4 Interdisciplinary Innovation Jam
17:30 – 22:00	Canal tour and conference dinner

## Friday 18 January 2019

08:45 – 10:30	SESSION 5 The Microbiota-Gut-Brain Axis in neurological and neuropsychiatric disorders
10:30 – 11:00	Networking break & poster viewing
11:00 – 12:30	SESSION 5 Continue
12:30 – 13:30	Lunch break & poster viewing
13:30 – 15:00	SESSION 6 Neurodegenerative diseases – Parkinson and Alzheimer
15:00 – 15:30	Networking break & poster viewing
15:30 – 16:15	WRAP-UP SESSION Top five lessons learned
16:15	Closing of <b>MIND, MOOD &amp; MICROBES</b>

## ACCREDITATION

The European Accreditation Committee in CNS (EACIC) has granted 15 CME credits to this Forum. To obtain your CME credits, complete the evaluation form at [www.eacic.eu](http://www.eacic.eu). The deadline to complete the evaluation form is **18 March 2019**.



## CONFERENCE PROGRAMME

### 10:00 Opening of MIND, MOOD & MICROBES

Prof. John F. Cryan, *Department of Anatomy and Neuroscience, University College Cork, Ireland*

## KEYNOTE PRESENTATIONS

### 10:10 Microbes and Mood – emerging roles for the microbiome in mental health

Prof. Jane Foster, *Department of Psychiatry and Behavioural Neurosciences, McMaster University, Canada*

### 10:35 A neurologist's perspective on the microbiome and gut-brain axis

Dr Filip Schepers, *Department of Neurology, Helsinki University Hospital, Finland*

## SESSION 1

## THE MICROBIOTA-GUT-BRAIN AXIS AND NEURODEVELOPMENT

**CHAIR:** Prof. John F. Cryan, *Department of Anatomy and Neuroscience, University College Cork, Ireland*

### 11:00 Chair's introduction

### 11:05 Stress, bacteria, and early development

Prof. Carolina de Weerth, *Behavioural Science Institute, Radboud University, The Netherlands*

### 11:25 Transmission of stress signals: neurodevelopmental programming through the maternal microbiome

Dr Eldin Jasarevic, *Department of Biomedical Sciences, University of Pennsylvania, USA*

### 11:45 Bacterial peptidoglycans during pregnancy and risk for neurodevelopmental disorders

Dr Rochellys Diaz Heijtz, *Department of Neuroscience, Karolinska Institutet, Sweden*

### 12:05 Microbiota and microglia: an inequality of the sexes

Dr Sonia Garel, *Brain Development and Plasticity, IBENS, France*

### 12:25 Chair's summary

### 12:30 Lunch break and poster viewing



## SESSION 2

## THE MICROBIOTA-GUT-BRAIN AXIS: A METABOLIC DIALOGUE

CHAIR: Prof. Michiel Kleerebezem, *Wageningen University & Research, the Netherlands*

13:30 Chair's introduction

13:35 Gut-microbiota metabolic dialogue: uncovering bacterial metabolites of neuromodulators  
Dr Sahar El Aidy, *Biomolecular Sciences and Biotechnology Institute, University of Groningen, the Netherlands*

13:55 The gut-brain axis: a metabolite super highway

Dr Jonathan Swann, *Division of Integrative Systems Medicine and Digestive Diseases, Imperial College London, UK*

14:15 Children with autism and their typically-developing siblings differ in exact sequence variants and predicted functions of stool-associated microbes

Dr Maude David, *Department of Microbiology & Pharmaceutical Sciences, Oregon State University, USA*

14:35 Targeting the gut microbiome as a translational research strategy to reduce pathological opiate use disorder

Dr Drew Kiraly, *Icahn School of Medicine at Mount Sinai, USA*

14:55 Food for better gut and mental health – lower your stress by better gut feeling?

Prof. Robert-Jan Brummer, *School of Medical Sciences, Örebro University, Sweden*

15:15 Chair's summary

15:20 Networking break and poster viewing

## SESSION 3

## SPEED PRESENTATIONS

15:45 - 16:15 A number of posters will be selected for short presentations.

## SESSION 4

## INTERDISCIPLINARY INNOVATION JAM

**GUT... BRAIN... ACTION!**

16:15 - 17:30 Research in the gut-brain field is increasing rapidly, however, clinical implementation is still in its infancy. **MIND, MOOD & MICROBES** brings together a diverse expert community united by the common interest for optimal (patient) care. This part of the programme enables you to meet new people within this community in small groups and share ideas. The use of new media enables us to utilise the collective intelligence and define next steps in accelerating the translation of available (and upcoming) research into improving mental health for those seeking solutions.

17:30 - 22:00 **SOCIAL PROGRAMME**

Canal tour (Amsterdam Light Festival) and conference dinner



SESSION 5

## THE MICROBIOTA-GUT-BRAIN AXIS IN NEUROLOGICAL AND NEUROPSYCHIATRIC DISORDERS

**CHAIR:** Prof. Marion Leboyer, *University Paris Est Créteil, France*

Prof. Iris Sommer, *University Medical Center Groningen, the Netherlands*

**08:45** Chair's introduction

**08:50** How the gut feeds the brain immune system

Prof. Marco Prinz, *Institute of Neuropathology, University Medical Centre Freiburg, Germany*

**09:10** Social Microbes – microbiome as a regulator of the social brain & behaviour

Dr Eoin Sherwin, *APC Microbiome Institute, University College Cork, Ireland*

**09:30** Gut microbes and vulnerability to stress-related disorders

Dr Marie-Claude Audet, *School of Nutrition Sciences, University of Ottawa, Canada*

**09:50** Understanding gut feelings: an integrated perspective on the effects of probiotics on cognitive and affective processes and mental health

Dr Laura Steenbergen, *Cognitive Psychology Unit & Leiden Institute for Brain and Cognition, Leiden University, the Netherlands*

**10:10** Stress, the gut-brain axis and the role of pro- and antibiotics

Dr. Isabelle Mack, *Department of Psychosomatic Medicine and Psychotherapy, University Hospital Tübingen, Germany*

**10:30** Networking break and poster viewing

**11:00** Bipolar disorder and the microbiota-gut-brain axis

Dr Robert H. Yolken, *Stanley Neurovirology Laboratory, Johns Hopkins School of Medicine, USA*

**11:20** Effect of probiotics and prebiotics on psychological outcomes in patients with major depressive disorder: a randomized clinical trial

Dr Kurosh Djafarian, *School of Nutritional Sciences and Dietetic, Tehran University of Medical Sciences, Iran*

**11:40** Microbial modulation of seizure susceptibility in refractory epilepsy

Dr Elaine Hsiao, *Department of Integrative Biology & Physiology, University of California, Los Angeles (UCLA), USA*

**12:00** The bi-directional communication between gut and brain after stroke

Dr Corinne Benakis, *Institute for Stroke and Dementia Research, Ludwig-Maximilians-Universität München, Germany*

**12:20** Chair's summary

**12:30** Lunch break and poster viewing

SESSION 6

## THE MICROBIOTA-GUT-BRAIN AXIS AND NEURODEGENERATIVE DISEASES – FOCUS ON PARKINSON'S DISEASE AND ALZHEIMER'S DISEASE

CHAIR: Dr Filip Schepers, Department of Neurology, Helsinki University Hospital, Finland

13:30 Chair's introduction

13:35 **No guts no glory: novel treatments strategies in neurodegenerative diseases**

Prof. Aletta Kraneveld, *Institute for Pharmaceutical Sciences, Utrecht University, the Netherlands*

13:55 **Investigation of the human gut microbiome: Towards early-stage diagnosis and stratification of Parkinson's disease**

Dr Jean-Pierre Trezzi, *Luxembourg Centre for Systems Biomedicine, University of Luxembourg, Luxembourg*

14:15 **Can lingonberries make us smarter? A targeted gut microbiota modulation for prevention of neuroinflammation and Alzheimer's disease**

Dr Frida Hållenius, *Department of Food Technology, Engineering and Nutrition, Lund University, Sweden*

14:35 **The role of the microbiota in neurodegeneration and the prospects for gene therapy**

Prof. Robert P. Friedland, *Department of Neurology, University of Louisville, USA*

14:55 Chair's summary

15:00 Networking break and poster viewing

15:30 – 16:15 WRAP-UP

## TOP FIVE ANSWERS LEARNED – WHERE ARE WE GOING?

CHAIR: Prof. John F. Cryan, *Department of Anatomy and Neuroscience, University College Cork, Ireland*

16:15 Closing of **MIND, MOOD & MICROBES**

## THE SCIENCE OF GUT FEELINGS: MIND, MOOD & MICROBES

### PUBLIC EVENT

**MIND, MOOD & MICROBES** will host a public event to raise awareness around the microbiota-gut-brain axis in mental health. This event is aimed to give the general public an opportunity to take a peek into today's science around this topic. The programme will include talks of experts and a panel discussion.

**WEDNESDAY 16 JANUARY 19:30 – 21:00**

The public event will be held in Artis Royal Zoo, Amsterdam, the Netherlands. Registration for this event is separated from the scientific conference.

## WEBSITE

The latest details of **MIND, MOOD & MICROBES** can be found at the conference website:  
[www.MindMoodMicrobes.org](http://www.MindMoodMicrobes.org)

## FOLLOW US AT TWITTER

 @MindMicrobes  
 #MMM2019  
 #MindMoodMicrobes

## WHO SHOULD ATTEND

The conference is designed for academics, healthcare professionals and health-related industries.

## HOW TO REGISTER AND BOOK A HOTEL ROOM

For all relevant information on registration fees, online registration and hotel accommodation, please go to the conference website: [www.MindMoodMicrobes.org](http://www.MindMoodMicrobes.org)

## VENUE

**MIND, MOOD & MICROBES** will be held at the KIT Royal Tropical Institute in Amsterdam, the Netherlands. The KIT Royal Tropical Institute building, which dates from 1926, has been one of Amsterdam's architectural landmarks. The building stands out with its elaborate neo-Renaissance style and numerous embellishments that are reminiscent of different cultures around the world. The KIT Royal Tropical Institute is an independent knowledge centre specialising in health, sustainable economics & social development, culture and education & information. During **MIND, MOOD & MICROBES**, the imposing octagonal Marble Hall will be used for coffee breaks, lunches, drinks and poster presentations.

## CALL FOR POSTER ABSTRACTS

Interested participants, particularly students, are strongly encouraged to submit poster abstracts by no later than **15 November 2018**. A number of posters will be selected for short presentations ('speed presentations'). For more information, visit the conference website: [www.MindMoodMicrobes.org](http://www.MindMoodMicrobes.org)

## BUSINESS OPPORTUNITIES

**MIND, MOOD & MICROBES** offers various business opportunities, including company stand, company brochure inserted in the conference bags, and advertisement in the book of abstracts. For all information, visit the conference website: [www.MindMoodMicrobes.org](http://www.MindMoodMicrobes.org)

## LANGUAGE

English will be the official language at **MIND, MOOD & MICROBES**.

*It may be necessary for reasons beyond the control of the organisers to alter the content and timing of the programme.*

## SECRETARIAT

Bastiaanse Communication  
P.O. Box 179  
3720 AD Bilthoven  
the Netherlands  
T +31 30 2294247  
[MMM@bastiaanse-communication.com](mailto:MMM@bastiaanse-communication.com)  
[www.MindMoodMicrobes.org](http://www.MindMoodMicrobes.org)