

# Ecophysiology of food-associated micro-organisms: roles in health and food functionality

2 – 4 December 2024  
 Wageningen Campus, the Netherlands



## COURSE AIM

This advanced course aims to develop expertise in (functional) genomics, physiology of food-associated micro-organisms and ecology, with respect to food functionality and consumer health. The focus will be on the microbiology of food fermentation processes addressing the newest scientific insights of complex microbial communities, modelling techniques and novel product functionalities, as well as stress-adaptive responses, population diversity and virulence of foodborne pathogens.

## COURSE DESIGN

The course will be composed of lectures with ample opportunity for discussions with experts in the field. All participants are requested to present their own work by means of a poster.

## PARTICIPANTS

PhD candidates and post-docs, as well as professionals from industry and research centres, involved in research related to the topic of the course. The course may attract microbiologists, biochemists, process engineers, food and nutrition scientists and biotechnologists. A graduate level in life sciences or a comparable background is expected.

## PROGRAMME TOPICS

The programme includes topics such as:

- LAB niche adaptation and functionality
- Laboratory evolution for enhanced functionality
- Bacillus sporulation and germination
- Bacterial extracellular vesicles in food & health
- Bacteriophage-host interaction in food associated microbes
- Phageome in the gut
- Fungal Endosymbionts
- Fungal biotechnology
- Novel bioreactor applications in food microbiology
- Lessons learned from traditional fermentations
- Trends in fermentation science

A full programme can be downloaded from the course website

## Course coordinators and lecturers

Prof. Eddy Smid, Prof. Tjakko Abee, Dr Yue Liu, and Dr Oscar van Mastriigt - Food Microbiology, Wageningen University & Research, the Netherlands

## Other faculty

- Prof Michiel Kleerebezem, Wageningen University & Research
- Prof Han Wösten, University of Utrecht
- Prof Jennifer Mahony, University College Cork
- Dr Marjon Wells-Bennik, NIZO Food Research
- Dr Herwig Bachmann, VU Amsterdam
- Dr Ineke van Boeijen, DSM-Firmenich
- Prof Heidy den Besten, Wageningen University & Research
- Dr Jan Dijksterhuis, Westerdijk Fungal Biodiversity Institute
- Dr Sijmen Schoustra, Wageningen University & Research
- Prof Colin Hill, University College Cork
- Prof Ioannis Athanasiadis, Wageningen University & Research
- Dr Carla Araya Cloutier, Wageningen University & Research

## COURSE FEE

WUR PhD candidates <sup>1</sup>	€225
Other PhD candidates	€450
Postdocs and staff affiliated to VLAG	€450
All other Postdocs and university staff, and non-profit organisations	€625
Industry / for-profit organisations	€1200

<sup>1</sup>WUR PhD candidates affiliated with VLAG/ WASS/WIAS/WIMEK/PE&RC/EPS with an approved TSP

## INFORMATION & WEBSITE

<https://www.vlaggraduateschool.nl/en/courses/course/Eco24.htm>

For information, please contact  
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