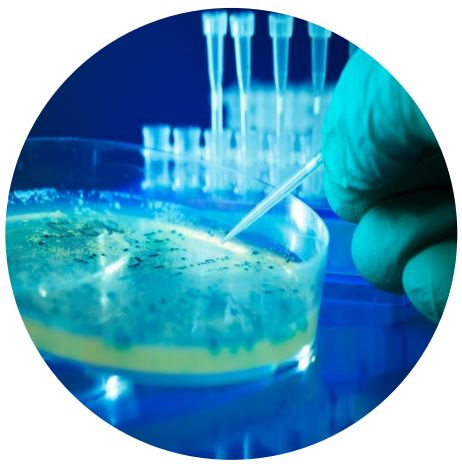
Postgraduate Course

Ecophysiology of food-associated micro-organisms: Roles in health and disease

Wageningen, The Netherlands, 29 November – 1 December 2021



AIM OF THE COURSE

This advanced course aims to develop expertise in (functional) genomics, ecology and physiology of food-associated micro-organisms, in particular with respect to their impact on health and disease focusing on the microbiology of food fermentation processes addressing the newest scientific insights of complex microbial communities, modelling techniques and novel product functionalities, and on stress-adaptive responses, population diversity and virulence of foodborne pathogens.

PROGRAMME TOPICS

- Bacillus sporulation & germination
- LAB bacteriocins & phage lysins
- The crowded cytoplasm
- Fungi in biotechnology
- Pathogen-host interactions
- LAB niche adaptation and functionality
- Bacterial extracellular vesicles in food & health
- Role microcompartments in pathogenic bacteria
- Listeria monocytogenes small RNAs
- Near zero-growth physiology & functionality
- Systems biology for food associated microorganisms
- Role microcompartments in fermenting bacteria
- Laboratory evolution for enhanced functionality
- Industrial perspective on food biotechnology

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 and short oral presentation.

PARTICIPANTS

Persons interested in this advanced course should have a graduate level in life sciences or a comparable background. The course may attract microbiologists, food scientists, and biotechnologists.

LECTURERS

Prof. M. Kleerebezem, dr O. van Mastrigt, Y. Liu, dr H. den Besten, Prof. J. Wells, Z. Zeng, A. Dank and dr R. Notebaart, WUR
Dr M. Bennik-Wells, dr H. Bachmann, NIZO food research
Prof. C. Hill, University College Cork
Prof. H. Wösten, Utrecht University
Prof. B. Poolman, University of Groningen
Prof. B. Kallipolitis, University of Southern Denmark
Dr V. Boer, Heineken

COURSE ORGANIZERS

Prof EJ Smid and Prof T Abee, Food Microbiology, WUR
Y Smolders; The Graduate School VLAG, WUR

COURSE FEES [1]

VLAG / WU PhD candidates	€ 225
All other PhD candidates	€ 450
Postdocs, and other academic staff	€ 625
Participants from the private sector	€1200

[1] includes digital learning materials, lunches/tea/coffee and 1 dinner.

REGISTRATION AND INFORMATION

https://www.vlaggraduateschool.nl/en/courses/course/Eco21.htm

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