

## Postgraduate Course

# Genetics and Physiology of food-associated micro-organisms

Wageningen, The Netherlands, 21-23 November 2016



### 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 reactions to a variety of stresses that can be imposed deliberately on micro-organisms during food processing, by food preservation techniques including fermentation, during distribution and storage, and in the human GI-tract.

### COURSE DESIGN

The course will be composed of 1) lectures with ample opportunity for discussions, 2) an interactive session on communication skills 3) a guided tour at WUR campus and 4) a site visit with presentations and a lab/pilot scale research facilities tour at Food and Biobased Research, WUR.

### 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.

### PROGRAMME TOPICS

- Bacillus sporulation & germination
- Responses to novel preservation techniques
- Single cell analysis & heterogeneity
- LAB bacteriocins & applications
- Spoilage fungi
- Fungi in biotechnology
- Bacteriophages in LAB
- Stress response & virulence in food pathogens
- Pathogen-host interactomics
- Eco-physiology of the human GI-tract
- Signal transduction
- Robustness biomarkers
- small RNAs
- Biocide & antibiotic resistance
- Phenotype genotype matching
- Microbial systems biology

### COURSE LECTURERS & ORGANIZERS

**Prof C Hill;** UCC & Alimentary Pharmabiotic Centre, Ireland

**Prof B Kallipolitis;** University of Southern Denmark

**Prof H Ingmer;** University of Copenhagen, Denmark

**Prof HAB Wösten;** Utrecht University

**Dr J Dijksterhuis;** Fungal Biodiversity Centre, Utrecht

**Dr MHJ Wells-Bennik;** NIZO food research, Ede

**Dr M Nierop Groot & Prof J. Hugenholtz;** Food & Biobased Research, WUR

**Prof M Kleerebezem & Prof J Wells;** Host-Microbe Interactomics, WU

**Dr R. Notebaart;** RadboudUMC Nijmegen

**Dr HMW den Besten, Prof EJ Smid, Prof MH Zwietering &**

**Prof Tjakko Abee (Course director);** Laboratory of Food Microbiology, WU

**Chantal Doeswijk;** The Graduate School VLAG

### COURSE FEES <sup>1</sup>

VLAG / WU PhD candidates	€ 175,-
All other PhD candidates	€ 375,-
Postdocs, and other academic staff	€ 550,-
Participants from the private sector	€1100,-

<sup>1</sup> includes materials, lunches/tea/coffee and 2 dinners.

### REGISTRATION AND INFORMATION

<http://www.vlaggraduateschool.nl/courses/physiol.htm>

For information contact:

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