

Advanced imaging course

Microscopy and Spectroscopy in Food and Plant Sciences

The course will cover both theoretical and hands-on training in a range of advanced microscopic and micro-(spectro)-scopic techniques with broad applications in Food and Plant Sciences.

Date: 2nd- 4th February 2026 (deadline: 14 December 2025)

Location: WUR –campus

Organisation: MicroSpectroscopy Research Facility (MSC) and the Wageningen Light Microscopy Centre (WLMC) , VLAG and EPS

Target: PhD candidates and postdocs

Participants: max 24 (selection based on abstract)



[More Information](#)

Core Topics

- Sample preparation
- Optics: contrast, resolution, diffraction
- Image generation principles

Applications

- Super-resolution imaging
- Molecular localization & interactions
- Live cells & complex food samples

Image Analysis

- Fiji/ImageJ tutorial
- Data processing & algorithm selection

Advanced Confocal Techniques

- Spinning Disk
- Multiphoton
- Multispectral
- TIRF
- FRET/ FLIM
- STED

Hands-On Training

- Small group demos (max. 6 participants)
- Real imaging experiments

Course Outcome

- Confidently choose imaging methods
- Apply tailored data strategies for your research

Docents



Dr Norbert C.A. de Ruijter
Manager WLMC, Plant Developmental Biology



Dr Peter A.C. van Gisbergen
Researcher Cell and Developmental Biology



Dr Jan Willem Borst
Assist. Prof. at Laboratory of Biochemistry, Manager MSC, Agrotechnology & Food Sciences Group



Dr Arjen Bader
Lecturer at Biophysics and Manager Microspectroscopy research facility Agrotechnology & Food Sciences Group

Organized by:



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