

Biol239: Master Module Microbial Cell Biology Practical Course (June 2020)



Prof. Dr. Marc Bramkamp
Chair of Microbial Biochemistry and Cell Biology

Organisation:

The practical course will be accompanied by a lecture series.

Time: The course will be held from **08.06.20-19.06.20**

Start: Mon. 08.06. 10:15 am seminar room IFAM (1. floor biocenter)

Lectures: Everyday before practical course.

Mo./Fr. 10:15-11:45 am.

Tue. / Wed. / Thu.: 9:15-10:45 am

Information: bramkamp@ifam.uni-kiel.de

Topics of lecture:

- Bacterial Cell Biology
- Subcellular organization / Molecular self organization
- Cytoskeletal structures in prokaryotes
- Use of modern fluorescence microscopy incl. superresolution



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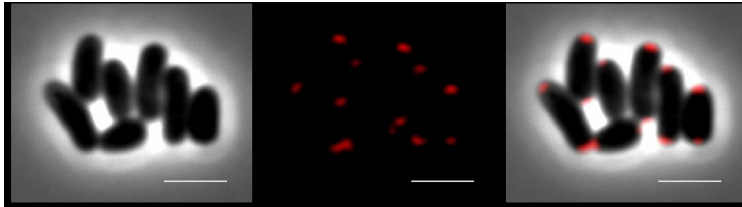
Biol239: Master Module Microbial Cell Biology

Practical Course (June 2020)

Practical course:

The course will be done in the labs of the division (**Room E28**, IFAM, Biocenter)

- Expression and purification (with Äkta FPLC) of a modified ATP-sensor (His-tag, FRET-pair) and biochemical analysis by FRET (Förster resonance energy transfer)
- Molecular Cloning
- Fluorescence microscopy (co-localisation of proteins involved in cell division)

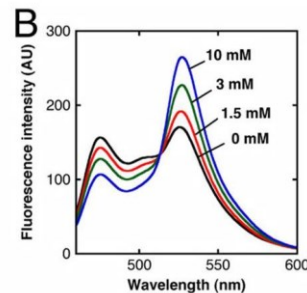
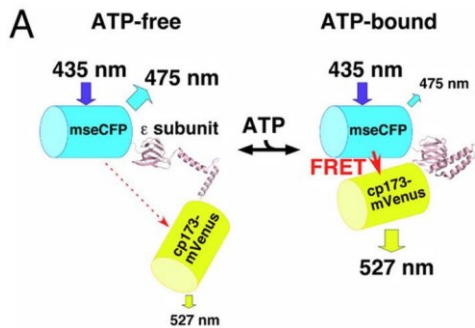


Examination:

Lab reports (not graded) and exam (graded)

What do you learn:

- Use of fluorescence techniques in modern cell biology/microbiology
- Use of state-of-the-art FPLC
- Data analysis and work independently



We are looking forward to seeing you!