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 prokayrotes
• Use of modern fluorescence microscopy incl. superresolution
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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!