33rd JYVÄSKYLÄ SUMMER SCHOOL, 2024

Biology and Environmental Science

Bacterial Light Perception and Optogenetic Applications (12-16th August, 2024)

Jyväskylä, Finland

Course contents

Bacterial optogenetics
Photoreception and photoacclimation in cyanobacteria
Applications of cyanobacteria in biotechnology and optogenetics

Lectures by

Prof. Andreas Möglich (University of Bayreuth, Germany)
Prof. Yagut Allahverdiyeva-Rinne (University of Turku, Finland)

Course coordinators

Dr. Amit Srivastava (University of Jyväskylä, Finland)
Dr. Heikki Takala (University of Jyväskylä, Finland)

Applicants

M.Sc., Ph.D., and postdoctoral scholars
(Molecular biology and microbiology background)

Application deadline

30th April, 2024

Contact:
Dr. Amit Srivastava
MSCA fellow, Takala Group (Optogenetic Module)
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Details:
Course: NANO3/BIO2: Bacterial light perception and optogenetic applications
Theme: Self-assembly in Biological and Molecular Materials
Study mode: In person
Language: English
Max. number of participants: 24 (lab course in 2 groups)
Code: NANS7013
Modes of study: Lectures and wet-lab courses
Credits: 3 ECTS
Evaluation: Pass/fail

Learning outcomes:
- Comprehensive understanding of bacterial optogenetics principles
- Knowledge of photoreception and photoacclimation in cyanobacteria
- Hands-on laboratory skills and critical thinking in experimental design in optogenetics
- Awareness of cyanobacterial applications in biotechnology

Useful links:
Jyväskylä Summer School Course Programme
How to apply to Jyväskylä Summer School
Jyväskylä Summer School Course Schedule