

BIO-666

**Practical - Blokesch Lab**

Blokesch Melanie

Cursus	Sem.	Type
Molecular Life Sciences		Obl.

Language of teaching	English
Credits	1
Session	
Exam	Oral presentation
Workload	30h
<b>Hours</b>	<b>24</b>
Courses	6
TP	18
<b>Number of positions</b>	<b>4</b>

**Frequency**

Every year

**Remark**

3-day Block course, every year in January. To register, contact EDMS Administration

**Summary**

How to look at tiny things: visualizing protein localization in bacteria using epifluorescence microscopy.

**Content**

Theory:

Basics on protein localization in bacteria.

Practical part:

Preparing bacteria for microscopy.

Staining methods to visualize bacteria.

Epifluorescence microscopy.

Comparison of protein localization depending on protein levels (varying artificial induction).

Basic image analysis (MicrobeTracker).

Independent analysis of an unknown bacterium for cell shape and potential localized fluorescently labeled proteins.

**Note**

Note that while the course is open to all first year EPFL doctoral students, priority will be given to EDMS students, given that they are mandated to take three of EDMS practical modules. Doctoral students from the Blokesch laboratory cannot take this course. Minimum 2 students, max. 4 students.

**Resources****Websites**

- <http://blokesch-lab.epfl.ch/>