## **Max Planck Institute for Marine Microbiology**

Celsiusstrasse 1, D-28359 Bremen, Germany **CLSM laboratory** 

## Proposal form for CLSM analysis at the Max Planck Institute for Marine Microbiology.

Please provide a short (no more than 2 pages) informal proposal which specifically addresses the following:

- 1. Briefly describe the main objective of the proposed research and its relevance. What is the broader impact of your study?
- 2. Explain why the CLSM analysis is necessary for your research and what you expect to find.
- 3. Provide the proposed experimental design with a detailed sketch protocol. Give details on the fluorochromes and pigments involved, the planned analytical methods (LSM/ SR-SIM/ PALM) and analysis time requested. The design and details will help determine the feasibility and success of the experimental design.
- 4. Specifically describe:
  - origin of sample
  - target cells to be analysed (size, phylogenetic affiliation)
  - if you are using established protocols
  - treatment of cells (fixation, permeabilisation, staining)
  - preparation style (e.g. embedded filter pieces on glass slides)
  - mounting medium used
  - which stains will be used (give details: Excitation / Emission)
  - which lasers are needed (wavelength)
  - indicate, if you need SIM/PALM/STORM and why
  - requested slot numbers and slot length
  - provide desired time frame or dates; if you are not able to come up with dedicated dates yet, please give a timeframe, e.g., once per week in May or 3 days in a row in June.
- 5. Provide a summary of the project after the last analysis

## **Important NOTES**:

- Please make yourself familiar with CLSM and superresolution techniques <u>before</u> you
  write the proposal. Carefully consider if CLSM or superresolution is really needed to
  answer your experimental questions and if it is applicable to your experimental setup.
- The quality of the samples (e.g. fluorescence signal intensity, background, etc) needs to be checked by standard epifluorescence microscopy **beforehand**.
- A personal introduction to the system is mandatory for every new user. Experience in epifluorescence microscopy is expected.
- We only provide access to the instrument within our working hours between 9 am and 6 pm.

Please email your proposal to aellrott@mpi-bremen.de.