



# Molecular Microbial Ecology Group

## Marine Biological Laboratory

### University of Copenhagen



## Research area of interest

Systems: marine waters (Southern Ocean, Atlantic, Baltic Sea)

Processes: heterotrophic nitrogen fixation but also DOC-channelling (microbial loop)

Organisms: planktonic microbial communities, bacterial isolates, ciliates (+ symbionts)

Our general research interests concern marine microbial ecology. We apply molecular and microbiological tools to identify factors that regulate bacterial community composition in the ocean. Recent and ongoing projects are related to the ecological role of heterotrophic N<sub>2</sub>-fixing bacterioplankton, bacterial diversity and population dynamics.

## Members of research group



Lasse Riemann  
(Group leader)



Mikkel Bentzon-Tilia  
(PhD student)



Sachia Jo Traving  
(PhD student)



Elisabeth Münster Happel  
(Master student)



Jennifer and Adam Martiny  
(Visiting scientists on 1-year sabbatical)



Jeanett Hansen  
(Lab technician)



Sara Bentzon-Tilia  
(Research assistant)



Claudia Dziallas  
(Postdoc)



Ina Severin  
(Postdoc)



Julie Dinasquet  
(Postdoc)

## Methods

Observational studies and experiments

- Nitrogen fixation (<sup>15</sup>N, ARA)
- Enzyme assays
- Bacterial production and respiration
- BIOLOG Eco-Plates
- Sequencing (454 and Illumina)
- qPCR (TaqMan and SybrGreen)
- mRNA FISH
- Cultivation
- Flow cytometry

## Resources

- Research Vessels
- Molecular Lab
- Isotope Lab
- Gas Chromatograph
- Flow Cytometer
- Epifluorescence Microscope

## Five key publications

