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**2 PhD Positions - Evolution and Genetics of Biomarkers**

**PhD**

**NIOZ Royal Netherlands Institute for Sea Research**

Netherlands, Den Burg

**Job description: 2 PhD’s “Evolution and genetics of synthetic pathways of microbial lipid biomarkers”**

**The Department of Marine Microbiology and Biogeochemistry (MMB; department chair Prof. Dr. J.S. Sinninghe Damsté) is looking for two highly motivated students with a background in molecular biology and/or microbial physiology. Experience with genetics and general microbiology techniques is beneficial.**

**LOCATION: ROYAL NIOZ TEXEL, 'T HORNTJE (TEXEL, THE NETHERLANDS)**

**THE DEPARTMENT**

The Department of Marine Microbiology and Biogeochemistry performs detailed studies on microbial communities in the marine environment. We study the diversity, physiology and activity of phytoplankton, prokaryotes (archaea and bacteria) and viruses in diverse marine environmental settings by a variety of techniques, including modern genomic techniques.

**THE RESEARCH PROJECT**

The aim of the ERC-funded project “MICROLIPIDS” is to characterize the hidden diversity of microbial lipids and their lipid biosynthetic pathways to improve our understanding of the evolution of lipid acquisition in the three domains of life and to implement microbial lipids as biomarkers in the environment and as organic proxies in earth science.

The project is comprised of several subprojects, each focusing on different aspects of microbial lipids from a different perspective, i.e. analytical chemistry, molecular biology and microbial ecology.

In this subproject, the goal is to determine the biosynthetic pathways leading to specific microbial lipids and to investigate their gene regulation under different physiological and environmental conditions.

**Desired skills and experience**

**THE CANDIDATE(S)**

We are looking for two highly motivated students with a background in molecular biology and/or microbial physiology. Experience with genetics and general microbiology techniques is beneficial. Due to the international character of the research group, excellent English communication skills are expected.

**CONDITIONS**

We are offering a fulltime position for 4 years, a pension scheme, a yearly 8% vacation allowance, year-end bonus and flexible employment conditions. Conditions are based on the Collective Labour Agreement of Research Centers. The position will be located on Texel. Cost of relocation and help with housing is provided by NIOZ.

Additional information on job details: Dr. Laura Villanueva (research scientist) and/or Prof. Dr. J.S. Sinninghe Damsté (department head).

To submit your application, please click the **link:**

[**https://www.workingatnioz.com/job-application.html?id=1926**](https://www.workingatnioz.com/job-application.html?id=1926)