

Scientific researcher for the project ‘Metagenetic upgrading of biodiversity research on free-living marine nematodes in Vietnam’

Project: Mangroves are located at the boundary between marine and terrestrial environments and provide shelter for important fish species. Unfortunately mangroves are also strongly impacted by coastal development, altering biodiversity and ecosystem functioning. Nematodes are often used as bioindicators for the health of an area because nematode species show different responses to environmental stressors and because their small sizes prevent escape from the impacted area. However, their small body size and lack of easily observable morphological characters complicates their identification, and makes the study of nematode communities very labour intensive. In this project, we built upon the reference database with identified and sequenced nematode species from the Can Gio mangrove area in Vietnam. Nematode communities from 3 zones in the Can Gio mangrove system: a pristine area, an aquaculture area and an industrial area will be analysed through next generation sequencing of their DNA and RNA. The combination of the RNA shotgun sequencing approach and the DNA metagenetic approach will provide crucial information to develop efficient monitoring systems to understand the effect stressors have on ecosystems worldwide.

Profile:

we are looking for an enthusiastic colleague

- holding a master in biology or biotechnology or nematology or marine sciences by the first of September 2016
- with experience in molecular wet lab practices (DNA extraction, PCR); experience in next generation sequencing is an asset
- highly interested in (meta)barcoding and in metatranscriptomics of meiofauna from human impacted areas
- with well-developed bioinformatic skills; experience with perl, QIIME and R are an asset
- with very good english writing and presenting skills

Function:

- preparation of metagenetic and transcriptomic libraries
- analyses of Illumina Miseq and Hiseq sequence data
- distribute results through science communication

Working environment:

- a two year full time contract (salary according to barema's)
- the project is a collaboration between the Marine Biology Research group (UGent) and the Royal Belgian Institute of Natural Sciences in Brussels. The core activities will be conducted in RBINS
- RBINS has a dynamic team dedicated to DNA barcoding and metabarcoding, and has all equipment available for preparation of next generation sequencing libraries

Interested?

Send your CV and motivation letter with contact information of two referents to Dr Sofie Derycke (sofie.derycke@naturalsciences.be) before June 24th 2016, 12 am. For more information, contact Dr Sofie Derycke or Prof Dr Ann Vanreusel (Ann.Vanreusel@ugent.be).