

PhD scholarship available for project on Microbial Ecology of the coral holobiont

This project explores the effect of macroalgae on the microbiome of the coral holobiont. It is hypothesized that one effect of macroalgae on coral are due to shifts in the coral microbiome. The PhD candidate will examine microbial communities on coral and macroalgae *in situ* as well as in controlled laboratory experiments. Metabarcoding of the coral holobiont will be performed and microbial community shifts determined. Furthermore, we will compare gene expression profiles of the coral holobiont in response to treatments.

About SCELSE (<http://www.scelse.sg>)

We are a Research Centre of Excellence in Singapore fully funded by the Singapore government through the Ministries of Education and the National Research Foundation, with a mandate to develop in depth knowledge of how microbial communities function. SCELSE is highly interdisciplinary, with PIs from a range of disciplines including Microbiology, Engineering (environmental, civil and aerospace), Physics, Chemistry, Genetics, Computational Sciences, Medicine and Molecular Biology. We have fully integrated, in-house sequencing and imaging facilities as well as direct access to the Singapore Phenomics Centre for metabolome studies, animal house facilities and direct access to the national marine science facility. The centre works in a number of different domains, including studies of the air, water (fresh and marine) and human biomes, target guided drug development for biofilm control strategies, the ecology of microbial biofilms and the development of technologies for either studies of biofilms, or to exploit biofilms for a range of applications.

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