

**Title of Project:** Quantifying the impacts of environmental stress on marine microorganisms

**Names of supervisors:**

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**Brief description of the project:**

Microbes underpin ecosystem health and are known for their ability to quickly respond to environmental perturbations through community composition and functional changes. However, despite their sensitivity, dose-response relationships, and cause-effect pathways in response to environmental stressors and contaminants have not been empirically established for microbial populations. This project will perform ecotoxicological tests and use molecular tools to develop species sensitivity distributions for marine microbes to a range of environmental pressures and contaminants. Outcomes from this research will enable derivation of threshold values for populations of marine bacteria to be used in environmental risk and vulnerability assessments for the first time.