PhD Research Opportunity in the ecological connectivity between marine hard and soft-sediment ecosystems – Centre for Marine BioInnovation (CMB), University of New South Wales (UNSW) Australia.

UNSW Australia is one of Australia’s leading research institutions and has a large and vibrant group of marine scientists. An exciting new PhD research opportunity is available to integrate research across different ecosystems to determine the connectivity between rocky-shore and soft-sediment ecosystems.

**Project Focus:**
The ability of a habitat to support biodiversity can depend on processes in neighbouring habitats in addition to qualities of the habitat itself. Predicting what controls ecosystem functioning requires a better understanding of the ecological connectivity between habitats. The proposed research will focus on the enhancement of rocky reef ecosystem function by organisms in connected soft-sediment habitats through the provisioning of additional hard surfaces for colonisation. The project will investigate the mechanisms that underpin facilitation of rocky shore communities to host organisms in soft-sediments and potential feedbacks to the hosts.

This 3-year PhD project combines extensive experimental ecology with behavioural and community ecology, and ecosystem engineering theory. This project will advance our basic understanding of the connectivity in marine ecosystems and enhance our understanding of the processes that determine biodiversity.

**Candidate Background:**
The successful PhD student will become a member of a highly collaborative research group and will be supervised by Assoc. Prof. Paul Gribben (CMB UNSW), Assoc. Prof. Alistair Poore (EERC UNSW) and Dr. Jeff Wright (UTAS). The student will also utilise the Sydney Institute of Marine Science (SIMS), one of the premier marine science institutes in Australia, which has extensive facilities for conducting ecological experiments and microbial analyses.
Students with experience in experimental marine ecology are encouraged to apply. Australian or New Zealand students will need to apply for an Australian Post-Graduate Award (APA – due 17th October 2014). International students are encouraged to apply for an International Research Candidate Scholarships (due February 2015). Details of both scholarship and the criteria for eligibility for a PhD at UNSW can be found at http://research.unsw.edu.au/future-students. The successful candidate will also receive a $5000 top-up to their scholarship. Candidates are also eligible for a 6-months scholarship extension, if required, towards the end of their PhD studies. Therefore applicants will have a relevant 1st Class Honours degree (or equivalent for international applicants), as well as a good knowledge of experimental design and statistical analyses.

For further information, please email p.gribben@unsw.edu.au