


Research opportunity:	Honours	x	Masters	PhD
Project title:	Identifying the root nodule bacteria associated with native and invasive legume species on Christmas Island			
Short project description & main objectives: 	A collection of root nodule bacteria isolates is available from several legume plant species, both invasive and native to Christmas Island. However, the root nodule bacteria have not been identified and their characteristics are still unknown. You will identify this collection of bacteria using classical microbiology tests including 16S rRNA sequencing, housekeeping gene analysis and growth tests. Additionally, you will also test the symbiotic performance of these strains in glasshouse experiments to understand how effective they are at fixing nitrogen with their host.			
Keywords:	Root nodule bacteria, effectiveness, nitrogen, Christmas Island			
Principal supervisor:	Dr Sofie De Meyer			
Other supervisors:	Dr Katinka Ruthrof, Prof John Howieson			
Contact details for further information:	s.demeyer@murdoch.edu.au			
Closing date for applications:	Open-ended			
Start & finish date of project:	N/A			
Available part-time?	Yes			

If applicable:

Research centre/group:	Centre for Rhizobium studies
Desired background of applicants:	Completion of BIO246 Microbiology I or equivalent; knowledge of molecular techniques and/or plant biology
Additional funding/scholarship provided:	Successful applicants will be eligible to apply for the ALOSCA Honours Scholarship and the Soil Microbiology and Soil Carbon Honours Scholarship.
Other benefits:	
Extra Comments:	