

Students in marine population connectivity:

I'm looking to take on a couple enthusiastic and skilled students to start a **MSc or PhD degree** in my **marine ecology and conservation** lab at the **University of Melbourne, Australia**. I'm particularly seeking prospective students that have completed an undergraduate degree with a focus in marine biology / ecology / quantitative ecology / computational biology and have had coursework (or demonstrated skills) in statistics, mathematics, programming, or ecological modelling.

Although I am happy to discuss any project ideas with competitive students, I am seeking students in three specific research areas in late 2015 or early 2016. I will be providing all computational resources, advanced training in spatial modelling (e.g., biophysical dispersal modelling, network analysis, advanced GIS), and access to field and lab opportunities. I will not be providing tuition and fees, but see [here](#) for admission requirements, funding opportunities (e.g., [APA](#), [IPRS](#), [MIRS](#)) and the application process.

Current research areas:

1. Exploring the spatiotemporal patterns in broad-scale marine population connectivity and the influence on gene flow and biogeographic patterns. Particular focus on the Indo-Pacific and the impact of spawning phenology, temperature, local habitat attributes, and climate drivers. This research relies heavily on GIS, biophysical modelling, spatial analysis, and reanalysing population genetic data.
2. Quantifying the metapopulation dynamics and resilience in the subtidal rocky reefs of Port Phillip Bay, Australia. Using a variety of taxa (including invasives), our goal is to identify key habitat patches and dispersal pathways to assist in the regional management of the Bay. This project involves field sampling (population surveys), lab experiments (larval development and behavioural studies), and spatial metapopulation modelling.
3. Mapping and analysing the spatial patterns in the recruitment and persistence in Victorian abalone and rock lobster fisheries using advanced geospatial, oceanographic and ecological modelling, and local habitat assessment. Our goal is to improve the understanding of the roles that environmental factors, including oceanographic and ecological processes, play in delivering expected outcomes from various management strategies.

To inquire about these study/research opportunities, please send me an email containing i) one page letter describing your relevant experience, research interests, and professional goals, ii) a brief CV, iii) a copy of academic transcripts, and iv) the names and email addresses of two references.

Kind regards,



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