Scholarship Description: UNSW is seeking a high calibre Ph.D student to investigate and quantify the response of mangroves to climate change in northern Australia. The scholarship will be available for a period of three years (with a possible extension of 6 months). Candidates holding their own scholarship are also encouraged to apply. A top-up scholarship of $8,000 per annum will be provided.

The Project: Mangroves along Australia’s northern coastline have remained relatively undisturbed from human activities but are nevertheless expanding both seaward and landward expansion, particularly along the Gulf of Carpentaria. This project seeks to use remote sensing data acquired by airborne (e.g., lidar, aerial photography) and spaceborne C- and L-band radar and optical sensors to quantify decadal changes in the extent, species composition, structure and biomass of these mangroves and b) to understand the relative contributions of changes in sea level, hydrological regimes, weather patterns and ocean circulation and whether these have been exacerbated by human-driven climate-change. The project provides an excellent opportunity to gain and integrate skills in marine and freshwater ecology, coastal dynamics and remote sensing. Good computing and quantitative skills are desirable together with excellent writing and communication skills and ability to work independently. The student should also be willing to undertake fieldwork in remote environments. A demonstrated enthusiasm for research is paramount.

The Research Group: The top up scholarship will be under the supervision of Professor Richard Lucas, Professor Richard Kingsford and Dr. Mirela Tulbure. The student will be a part of a strong research team based at the Australian Wetlands, Rivers and Landscapes Centre (http://www.wetrivers.unsw.edu.au) and part of the School of Biological, Earth and Environmental Sciences (http://www.bees.unsw.edu.au/) at the University of New South Wales in Sydney.

Application process and deadlines: For further information, please contact Professor Richard Lucas (richard.lucas@unsw.edu.au). Interested candidates should send a CV, undergraduate transcripts and contact details for two referees to Professor Lucas. Applications will be accepted until a suitable candidate is found. International students should apply by the 6th September 2013 whilst domestic students should apply by 18th October for a January 2014 start date but earlier if possible.