

Summary of Linkage Projects Proposals for Funding to Commence in 2009

Queensland

James Cook University

LP0990664 Prof R De Nys; Dr SW Whalan; Ms S Thyer

Approved Project Title **Towards closing the life cycle of marine sponges: benefits for public aquarium display and coral reef conservation.**

2009 : \$ 47,500

2010 : \$ 92,500

2011 : \$ 90,000

2012 : \$ 45,000

Primary RFCD 3007 FISHERIES SCIENCES

APDI Dr SW Whalan

Collaborating/Partner Organisation(s)

Reef HQ, Great Barrier Reef Marine Park Authority

Administering Organisation James Cook University

Project Summary

Biodiversity loss on the Great Barrier Reef is a focus of public concern, with social cultural and economic ramifications. Adaptive and innovative management can reduce impacts on biodiversity. Reef HQ, the largest coral reef aquarium in the world, is a leader in coral reef education and conservation, but relies on wild-stock collections for exhibits. The key national benefit is the provision of critical information to facilitate the sustainable culture of marine invertebrates for use in public aquariums and the ornamental aquariaum market thereby removing the reliance on wild collections. This is pivotal to reducing the overall pressure on coral reefs.

LP0990575 Prof ML Heron; Prof ML Banner; Prof LR Wyatt

Approved Project Title **Wave Climate in the Southern Great Barrier Reef**

2009 : \$ 44,000

2010 : \$ 86,500

2011 : \$ 85,000

2012 : \$ 42,500

Primary RFCD 2604 OCEANOGRAPHY

Collaborating/Partner Organisation(s)

Seaview Sensing Ltd

Helzel Messtechnik GmbH

Administering Organisation James Cook University

Project Summary

Sea surface roughness has a major influence on global climate modelling. This project will provide a better understanding of the variability of sea waves in coastal waters. New technology of HF ocean radar can map wave fields over coastal waters and thus fill a gap between the open ocean satellite measurements and the point measurements from wave buoys. In this project we will improve the analysis of the radar echoes to produce sea wave spectra, and evaluate focussing of waves by complex currents on the continental shelf to help improve wave forecasting in coastal waters. The HF radar will be used to experimentally test current theories of wind wave spreading.

Summary of Linkage Projects Proposals for Funding to Commence in 2009

LP0990606 Dr DR Jerry; Dr PJ Harrison

Approved Project Title **Optimising barramundi production through early prediction of thermal tolerance and growth**

2009 : \$ 60,000

2010 : \$ 120,000

2011 : \$ 120,000

2012 : \$ 60,000

Primary RFCD 3007 FISHERIES SCIENCES

APA(I) Award(s): 1

Collaborating/Partner Organisation(s)

Mainstream Aquaculture

Administering Organisation James Cook University

Project Summary

Aquaculture is Australia's fastest growing primary industry and is increasingly becoming an important employer in regional Australia. Consequently, positive growth in this sector linked to productivity gains through R&D will result in improved socioeconomic prosperity of regional communities. This project will allow barramundi farmers to identify highly productive families early on in the culture process, thereby improving their efficiency of farming and increasing their international competitiveness in the rapidly expanding global market. The project will also establish Australia at the forefront of biotechnological research and its applications to aquaculture.