

Queensland

James Cook University

LP0883306 Dr TG Blenkinsop; Prof NH Oliver; Dr J Miller; Mr MJ Nugus; Mr J Biggam

Approved Project Title **A mineral systems analysis of Australia's largest gold producing deposit: Sunrise Dam Gold Mine, Western Australia**

2008 : \$ 56,000

2009 : \$ 107,000

2010 : \$ 51,000

Primary RFCD 2601 GEOLOGY

Collaborating/Partner Organisation(s)

Anglogold Ashanti Australia

Administering Organisation James Cook University

Project Summary

This project will augment existing mineral resources at Australia's largest current gold producing mine, and guide exploration for additional resources in the surrounding district. By understanding the genesis of this exceptional deposit, the study will spawn a new set of targeting criteria that can be used to explore for other world-class deposits in Western Australia and similar geological terranes throughout the world. In the context of high and rising gold prices, the project has the potential to generate billion dollar revenues and substantial employment, and it will deliver advanced training at undergraduate and postgraduate levels.

LP0884011 Prof WJ Collins; Prof GS Lister; Dr TG Blenkinsop; A/Prof CL Fergusson; Prof RA Henderson; Mr IW Withnall; Mr PJ Donchak

Approved Project Title **Crustal Growth in the Northern Tasmanides**

2008 : \$ 32,500

2009 : \$ 67,500

2010 : \$ 67,500

2011 : \$ 32,500

Primary RFCD 2601 GEOLOGY

Collaborating/Partner Organisation(s)

Geological Survey of Qld

Administering Organisation James Cook University

Project Summary

The Australian and Queensland governments have invested over \$3 million to undertake deep crustal seismic imaging in northern Queensland, providing an extensive new geophysical dataset capable of modelling crustal architecture and geological evolution to unprecedented levels. However, such models will remain untested unless the data is groundtruthed by analysis of rocks at the surface, providing a geological framework for extrapolation into the deep Earth. The framework critically describes when and how crustal blocks were assembled, and the integrated information will generate evolutionary 3D models that will substantially improve mineral exploration targeting in the region.

Summary of Linkage Projects Proposals for Funding to Commence in 2008

LP0883720 Dr CA Simpfendorfer; Mr DJ Welch; Dr J Carlson

Approved Project Title **Spatial ecology of inshore predators in tropical marine systems and implications of marine protection zones**

2008 : \$ 32,500

2009 : \$ 65,000

2010 : \$ 65,000

2011 : \$ 32,500

Primary RFCD 3007 FISHERIES SCIENCES

Collaborating/Partner Organisation(s)

Great Barrier Reef Marine Park Authority
Queensland Department of Primary Industries and Fisheries
National Marine Fisheries Service
Queensland Seafood Industry Association

Administering Organisation James Cook University

Project Summary

Coastal development and threats of global climate change mean that coastal ecosystems are under increasing pressure. Developing an understanding of how coastal habitats are used by native fauna and how effective protected areas are in the preservation of these species is critical for future management and sustainable use of resources. This research will provide data for resource and fisheries managers that are valuable for maintenance of several sectors of the economy including tourism and commercial fishing (inshore fishing worth \$23 m a year). The project is linked to a national telemetry network thus providing opportunity for national and international collaboration benefiting scientific, management and coastal communities.