

Queensland

Griffith University

LP0883807 Dr M Blumenstein; Prof Y Loo; Dr H Guan

Approved Project Title **Artificial Intelligence Based Deterioration Model for Development of Bridge Network Maintenance Strategy**

2008 : \$ 75,976

2009 : \$ 151,683

2010 : \$ 135,816

2011 : \$ 60,109

Primary RFCD 2908 CIVIL ENGINEERING

APA(I) Award(s): 2

Collaborating/Partner Organisation(s)

Queensland Department of Main Roads

Gold Coast City Council

Administering Organisation Griffith University

Project Summary

The proposed AI-based methodology in conjunction with a Bridge Management System can tailor-make bridge deterioration models for a given bridge authority. The models so produced will enable effective BMS implementation which generates missing inspection records of past years, establishes optimal MR&R strategies and then reliably forecasts future bridge condition ratings. The methodology will be verified using available bridge datasets of QDMR and GCCC. The methodology is applicable to other bridge authorities throughout Australia and internationally to maintain ageing bridge stock.

LP0883429 Prof JM Hughes; Dr DA Crook; Dr J Marshall

Approved Project Title **Patterns of connectivity and hot-spots of recruitment: a basis for prioritising high value coastal rivers.**

2008 : \$ 45,000

2009 : \$ 95,000

2010 : \$ 90,000

2011 : \$ 40,000

Primary RFCD 2702 GENETICS

Collaborating/Partner Organisation(s)

Department of Sustainability and Environment

Department of Natural Resources and Water

Melbourne Water

Tasmanian Fisheries

Administering Organisation Griffith University

Project Summary

Provision of water for agricultural, industrial and residential use is becoming increasingly difficult in Australia. By determining the need for important migratory fish species to have access to marine conditions, this project aims to assist managers to identify river systems where changing flow patterns will be particularly detrimental. The project will provide information about the need for artificial opening of estuary mouths, fish ladders and other practical means to ensure the continued survival of these species.

Summary of Linkage Projects Proposals for Funding to Commence in 2008

LP0883721 Prof AJ Moran; Ms S Wynn

Approved Project Title **The Place of Communication and Consumption: A Case Study of Australian Regional and Rural Cinema Exhibition**

2008 : \$ 12,813

2009 : \$ 25,627

2010 : \$ 25,627

2011 : \$ 12,813

Primary RFCD 4001 JOURNALISM, COMMUNICATION AND MEDIA

APA(I) Award(s): 1

Collaborating/Partner Organisation(s)

Australian Film Commission

Administering Organisation Griffith University

Project Summary

The project provides important, up-to-date analysis of a vital sector of Australia's growing service and knowledge economy. It will help government, film industry, arts and business organisations in the formulation of better policies and programs to assist in improving the quality of life for Australians living in regional and rural areas. It enhances research and training environments for junior researchers and postgraduate students, adding value to investigations already in progress. The research also extends consultative and collaborative capacities in cultural experience enhancement and access, community media development and cultural tourism.

LP0883246 Prof MS Wesley; Dr AK O'Neil; Dr R Ayson; Ms M Letts; Dr ME Clarke

Approved Project Title **Australia's Nuclear Choices**

2008 : \$ 73,951

2009 : \$ 145,902

2010 : \$ 138,402

2011 : \$ 66,451

Primary RFCD 3601 POLITICAL SCIENCE

APA(I) Award(s): 2

APDI Dr ME Clarke

Collaborating/Partner Organisation(s)

Department of Defence

Lowy Institute for International Policy

Administering Organisation Griffith University

Project Summary

Australia's nuclear choices will be made in the context of a challenging and fluid international strategic environment characterised in Australia's immediate region by heightened global concerns regarding such transnational dilemmas as terrorism, energy security and nuclear proliferation. This project, through exploring the nature, evolution and consequences of contemporary strategic, military and civil nuclear developments impacting on the international non-proliferation regime will enable Australian policy-makers to better calibrate the costs and benefits of potential policy changes across these strategic, regime and market realms of Australia's nuclear interests.