

# Summary of Successful Linkage - Projects Proposals for Funding to Commence in 2010 by State and Organisation

## Queensland

### Queensland University of Technology

**LP100100575** Prof David A Atchison, Mr Ankit Mathur, Dr Saulius R Varnas

**Approved Project Title** **Vision performance in relationship to spectacle lens design**

2010	\$80,182.00
2011	\$80,182.00
2012	\$80,182.00
Primary FoR	1113 OPTOMETRY AND OPHTHALMOLOGY
APDI	Mr Ankit Mathur

#### Partner Organisations

Carl Zeiss Vision Australia Holdings Ltd

**Administering Organisation** Queensland University of Technology

#### Project Summary

Refractive errors such as short-sightedness, long-sightedness or presbyopia (age related decline in near vision) are the leading causes of visual impairment in the world. Of these, presbyopia affects almost 100% of the population above 45 years of age. This represents over 40% of all Australians. Although spectacles provide a safe and easy means of correcting refractive errors, they affect quality of life due to distorted vision, discomfort such as head and neck ache and cosmetic effects. The goals of the project are to better understand the visual performance of young and old people who wear glasses and to develop improved spectacle lens designs to provide clear and comfortable vision over a range of distances.

**LP100100302** Dr Jason J Ford, Dr Luis Mejias Alvarez, Prof Rodney A Walker, Prof Peter J O'Shea

**Approved Project Title** **Automated vision-based aircraft collision warning technologies**

2010	\$292,000.00
2011	\$263,000.00
Primary FoR	0906 ELECTRICAL AND ELECTRONIC ENGINEERING

#### Partner Organisations

Boeing Defence Australia

**Administering Organisation** Queensland University of Technology

#### Project Summary

Australia is a sparsely populated country with a number of unique airspace features. This project will investigate novel vision-based collision warning systems that can improve safety for piloted aircraft and also help achieve integration of UASs (Uninhabited Aerial Systems) into national airspace. The benefits of UAS technologies are particularly relevant to Australia, as governments and industry struggle to cope with providing equivalent levels of service to remote communities over vast distances (or border protection of vast regions). The population base of Australia requires that cost-effective solutions are sought to meet this end.

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**LP100100232** A/Prof Marcus Foth, Prof Gregory N Hearn, Ms Jaz Hee-jeong Choi, A/Prof Eli B Blevis, Prof Younghui Kim, Dr Tad Hirsch

**Approved Project Title** **Eat, cook, grow: Ubiquitous technology for sustainable food culture in the city**

2010 \$106,851.00  
 2011 \$106,851.00  
 2012 \$106,851.00  
 Primary FoR 0806 INFORMATION SYSTEMS  
 APDI Ms Jaz Hee-jeong Choi  
 APAI\_IT 1

### Partner Organisations

Cityfood Growers Pty Ltd, Food Connect Pty Ltd, Intel Australia Pty Ltd, James Street Cooking School, Queensland Health

**Administering Organisation** Queensland University of Technology

### Project Summary

Raising people's awareness of healthy and ecological food options with nutritional data and educational information does not foster a sustained practice towards a more environmentally friendly food culture. This study seeks to develop a better understanding how to go beyond just informing and into supporting and sustaining action and change. Drawing on interaction design, ubiquitous computing and real-time information, the study will deliver research findings that inform viable new design approaches and information interfaces which will strengthen Australia's position to resolve the problems of obesity, malnutrition and ecological issues of mass food processing, and contribute to the sustainability of life in Australian cities.

**LP100100565** Prof Kerrie L Mengersen, Prof Ian W Turner, Dr Robert J Denham

**Approved Project Title** **Making the most of remotely sensed data: Bayesian spatio-temporal models for enhanced natural resource management and design**

2010 \$120,000.00  
 2011 \$119,000.00  
 2012 \$121,000.00  
 Primary FoR 0104 STATISTICS  
 APAI\_IT 1

### Partner Organisations

Queensland Department of Natural Resources and Water

**Administering Organisation** Queensland University of Technology

### Project Summary

This research will provide methods for cost-efficient spatio-temporal data collection and analysis, with increased capacity for better decision-making about managing Australia's natural resources. Through the Linkage partners' networks, these benefits will be disseminated throughout regional bodies, government agencies and research groups across and outside Australia. The statistical techniques derived in this project will enhance Australia's capability in the national priority area of mathematical sciences, and will contribute to knowledge in a wide range of disciplines including natural resources, medicine and genetics.

## Summary of Successful Linkage - Projects Proposals for Funding to Commence in 2010 by State and Organisation

**LP100100570** Prof Kerrie L Mengersen, A/Prof Gavin Turrell, A/Prof Peter D Baade  
**Approved Project Title** **Bayesian statistical models for understanding outcomes and improving decision-making for women screened for breast cancer**

2010	\$26,669.00
2011	\$26,669.00
2012	\$26,669.00
Primary FoR	0104 STATISTICS
APAI_IT	1

### Partner Organisations

BreastScreen Queensland, Cancer Council Queensland

**Administering Organisation** Queensland University of Technology

### Project Summary

This project has two key benefits: (i) the development of frontier statistical methods for spatio-temporal analysis and data synthesis, which are imperative in a wide range of disciplines; and (ii) the application of these methods for improved understanding of breast cancer outcomes for women screened in Queensland. The project results will lead to direct health and financial benefits through targeted policies for increasing screening uptake and reducing cancer morbidity and mortality and therefore health spending in this area. Importantly, the project represents an excellent training opportunity to develop a PhD candidate into an experienced interdisciplinary researcher.

**LP100100713** Prof Justin O'Brien, Prof Seumas R Miller, Prof Keith A Houghton, Mr Steven A Mark, Mr Graham J Ezzy

**Approved Project Title** **The Future of Financial Regulation: Enhancing integrity through design**

2010	\$93,000.00
2011	\$98,000.00
2012	\$94,000.00
Primary FoR	2201 APPLIED ETHICS
APAI	1

### Partner Organisations

Ernst and Young, Office of the Legal Services Commissioner

**Administering Organisation** Queensland University of Technology

### Project Summary

The global financial crisis and the attendant collapse of major financial institutions have called into question the efficacy of financial regulation and the standards of conduct of the key actors in the financial services sectors and financial markets. Ethical conduct is fundamental to the integrity of Australia's financial services sector and financial markets. This project will make a valuable and innovative contribution to the national priority goal of strengthening Australia's social and economic fabric by assisting market actors fulfil their professional roles in an ethical manner. By so doing it accords with the national priority goals of promoting an innovation culture and economy, and safeguarding Australia.

## Summary of Successful Linkage - Projects Proposals for Funding to Commence in 2010 by State and Organisation

**LP100100292** A/Prof Helen L Partridge, A/Prof Sylvia L Edwards, Prof Christine S Bruce, Dr Gary E Day, Ms Helen M Cooper

**Approved Project Title** **Understanding health information literacy in Australia's ageing population: A qualitative study**

2010 \$60,000.00  
2011 \$60,000.00  
2012 \$55,000.00

Primary FoR 0807 LIBRARY AND INFORMATION STUDIES

APAI 1

### **Partner Organisations**

Health Contact Centre- QLD Health

**Administering Organisation** Queensland University of Technology

### **Project Summary**

Australians need to know how to find and use information to help them age well. This research will establish a national Health Information Literacy Framework that will be an evidence-based guide for community agencies to use in creating resources and services to support the information needs of ageing Australians. Ageing Australians who are healthy and active are able to participate in the workforce, engage in the community while easing the burden on the national health care system. The research will place Australia at the forefront of health prevention and information literacy research. The research will be undertaken as a partnership between QUT, Griffith University and the Health Contact Centre.