

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

## Victoria

### Deakin University

<b>LP100100069</b>	Prof Colin J Barrow, Prof Andrew J Sinclair, Dr Ken Walder, Dr Jaroslav A Kralovec, Dr Harry S Ewart, Dr Jacqui L Adcock, A/Prof Margaret L Ackland, Dr Ian F Musgrave	
<b>Approved Project Title</b>	<b>Enzymatic synthesis, microencapsulation and biological evaluation of a new class of omega-3 derived functional food ingredients.</b>	
2010	\$150,000.00	
2011	\$150,000.00	
2012	\$170,000.00	
Primary FoR	0908	FOOD SCIENCES
APDI	Dr Jacqui L Adcock	
APAI	1	

#### Partner Organisations

Ocean Nutrition Canada Ltd

**Administering Organisation** Deakin University

#### Project Summary

Inflammatory mediated diseases such as cardiovascular disease, type-2 diabetes, metabolic syndrome and Alzheimer's disease are major causes of death in Australia. Rates of these diseases are rising over time, partly due to poor diet including low consumption levels of healthy omega-3 fatty acids from fish. This project aims to develop healthy food ingredients from naturally occurring omega-3 fatty acid derivatives that are more stable to oxidation and more biologically active than fish derived omega-3 fatty acids. The development of these omega-3 derivatives as functional food ingredients could provide an additional strategy for helping to prevent the rapid increase in inflammatory mediated diseases in the Australian population.

<b>LP100100311</b>	Prof Mari A Botti, Prof Brigid C Kent, Prof Tracey K Bucknall, Prof Megan-Jane Johnstone, Prof Maxine Duke, Dr Julie Considine, Dr Rosemary J Watts, Dr Bernice Redley, Mr Richard N de Steiger	
<b>Approved Project Title</b>	<b>Translation of evidence into pain management practices in acute care environments</b>	

2010	\$40,000.00	
2011	\$100,000.00	
Primary FoR	1110	NURSING

#### Partner Organisations

Cabrini Health, Eastern Health, Epworth Healthcare

**Administering Organisation** Deakin University

#### Project Summary

This project addresses the urgent need to reduce the substantial pain experienced by patients following surgery by improving the clinical processes associated with the treatment of pain. Each year in Australia, six million people are admitted to hospital for surgery. A recent review of Australian research has shown that up to 40% of hospitalised surgical patients experience significant pain. Despite the availability of effective treatment, pain after surgery is often under-treated and is one of the main postoperative adverse outcomes. A consequence of poor pain management is that patients experience unnecessary suffering, higher incidence of postoperative complications significant risk of developing chronic post-surgical pain.

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

**LP100100422** A/Prof Lingxue Kong, Prof Xungai Wang, Dr Tong Lin

**Approved Project Title** **Formation and characterisation of continuous electrospun nanofibre yarns**

2010 \$100,000.00

2011 \$98,000.00

2012 \$100,000.00

Primary FoR 0910 MANUFACTURING ENGINEERING

### **Partner Organisations**

Guangzhou Textile Union Group Co Ltd

**Administering Organisation** Deakin University

### **Project Summary**

Australia historically has a strong fibre and textile industry that can be augmented by embracing emerging nanotechnology. The proposed research will develop a technology that can greatly improve the productivity of nanofibres. These fibres can then be spun into continuous yarns and other form of textile products. The nanostructured products offer exceptional functions for biomedical and environmental applications. This new technology has the potential to transform the Australian textile technology and fibre processing industry.

**LP100100222** A/Prof Heath J McDonald, Prof Daniel C Funk, Prof Simon J Bell

**Approved Project Title** **The impact of new professional sporting teams on community engagement and fan development**

2010 \$88,000.00

2011 \$70,000.00

2012 \$88,000.00

2013 \$119,000.00

2014 \$32,000.00

Primary FoR 1504 COMMERCIAL SERVICES

APAI 2

### **Partner Organisations**

Australian Football League

**Administering Organisation** Deakin University

### **Project Summary**

New professional sporting teams are costly, often requiring substantial infrastructural support and government subsidies. This study of the launch of two new AFL teams will clarify the benefits gained in terms of the fan base they will stimulate as well as the well-being of the communities they enter, and identify ways to maximise both outcomes. This knowledge will increase the likelihood of AFL survival in a highly competitive global industry, and ensure governments and communities receive the best return for their investment in the new teams. A comprehensive understanding of the processes of acculturation for complex cultural services like AFL will also benefit other sporting and recreational industries that rely upon community support.

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

**LP100100454** A/Prof David J Mellor, Prof Marita P McCabe, A/Prof Lina A Ricciardelli, A/Prof Susan A Brumby  
**Approved Project Title** **Implementation and evaluation of a program to reduce alcohol and related problems among farm men and women**

2010 \$80,000.00

2011 \$80,000.00

2012 \$80,000.00

Primary FoR 1117 PUBLIC HEALTH AND HEALTH SERVICES

### Partner Organisations

Western District Health Service

**Administering Organisation** Deakin University

### Project Summary

Farming is pivotal to Australia's food production and economy; yet farm communities are under great stress. The Sustainable Farm Families program aims to strengthen rural communities across Australia, and our project will add an important component to it by producing an evidence-based strategy for encouraging farm men and women to adopt more positive alcohol-related behaviours that will lead to better physical and mental health. We expect that our project will reduce the level of dangerous alcohol consumption and enhance the economic, social and cultural fabric of rural Australia.

**LP100100898** Prof Saeid Nahavandi, Dr Ben P Horan  
**Approved Project Title** **Haptic realisation of visual art for the blind and visually impaired**

2010 \$55,000.00

2011 \$45,000.00

2012 \$50,000.00

Primary FoR 0906 ELECTRICAL AND ELECTRONIC ENGINEERING

### Partner Organisations

3G Engineering, Australia Council for the Arts

**Administering Organisation** Deakin University

### Project Summary

This research proposes a first-of-its-kind technological platform providing the blind and visually impaired with the ability to physically 'feel' the visual information contained within 2D visual art. Aside from facilitating equity and access to the visual arts, the ability for the blind and visually impaired to perceive the visual information contained within generic 2D images offers wider reaching benefits. The realisation of the proposed technological platform offers the radical potential to revolutionise the available technologies for assisting the blind and visually impaired. The realisation of this technological capability also offers the potential to introduce a new dimension to the communication mediums used within wider society.

**LP100100049** Dr Helen Skouteris, Prof Marita P McCabe, Prof Boyd A Swinburn  
**Approved Project Title** **Healthy eating and obesity prevention for preschoolers: A randomised controlled trial**

2010 \$70,000.00

2011 \$60,000.00

2012 \$70,000.00

Primary FoR 1701 PSYCHOLOGY

### Partner Organisations

MEND Australia

**Administering Organisation** Deakin University

### Project Summary

The cost to society of obesity is high from both a financial and psychosocial perspective. Australian researchers can take a lead in the prevention of obesity during the formative preschool years when prevention intervention strategies have been evaluated systematically and rigorously. This will be the first study in Australia to evaluate the impact of a healthy eating and childhood obesity prevention program for parents of preschool children, regardless of weight status. The findings will assist in further developing evidence-based prevention strategies that can be rolled out extensively in the Australian community for maintenance of healthy weight gain in preschool children.

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

**LP100100087** Dr Ken Walder, Dr Frederick M Pfeffer, Dr Nicky Konstantopoulos, Dr Guy Y Krippner  
**Approved Project Title** **Discovery and development of novel insulin sensitising compounds for the treatment of Type 2 diabetes**

2010 \$85,000.00

2011 \$85,000.00

2012 \$130,000.00

Primary FoR 0304 MEDICINAL AND BIOMOLECULAR CHEMISTRY

### Partner Organisations

Verva Pharmaceuticals Ltd

**Administering Organisation** Deakin University

### Project Summary

Diabetes is one of the major health problems facing Australia today, and current treatments are proving inadequate to combat this disease. We previously discovered a new drug with potential for development for the treatment of diabetes. In this project, we will identify how this drug works to combat diabetes in cell and animal models, and use novel chemistry approaches to modify the drug to improve its properties and reduce potential side-effects. The outcomes of this project will be understanding of a new biological process that contributes to the development of diabetes, and the discovery and characterisation of new chemical compounds that could be developed as drugs to treat diabetes.

**LP100100208** Prof Wanlei Zhou, Dr Yang Xiang  
**Approved Project Title** **An active approach to detect and defend against peer-to-peer botnets**

2010 \$50,621.00

2011 \$52,470.00

2012 \$56,015.00

Primary FoR 0803 COMPUTER SOFTWARE

### Partner Organisations

Belmont Computer Centre Pty Ltd

**Administering Organisation** Deakin University

### Project Summary

The aim of this project is to develop an effective defence system to help organisations detect and defend against the peer-to-peer (P2P) botnets. If this research is accomplished successfully, it will be a big step forward in defeating this new but devastating malicious software widely utilised by Internet criminals and terrorists. The capability of a nation to defend against the P2P botnet attacks on its information infrastructure is central to the control of such attacks and hence to a nation's long-term survival and prosperity. The outcomes of this project can be directly used in Australian research communities and adopted by industry and government agencies.

**LP100100816** Prof Wanlei Zhou, Dr Robin R Ram Mohan Doss  
**Approved Project Title** **Secure and Efficient Communication in Vehicle-based Radio Frequency Identification Systems**

2010 \$50,621.00

2011 \$52,470.00

2012 \$56,015.00

Primary FoR 0805 DISTRIBUTED COMPUTING

### Partner Organisations

Express Promotions Australia Pty Ltd

**Administering Organisation** Deakin University

### Project Summary

The successful completion of the project will enable the deployment of RFID technologies to improve current methods of reading and processing RFID tag information in numerous real-life applications. Based on the research from this project a real-life application in asset tracking will be developed and deployed through the industry partner. Such an outcome will generate knowledge that can transform and improve current logistics systems for Australian companies and their international clients and have the potential to significantly increase the efficiency of decentralised business environments such as logistics and supply chain management particularly in the fields of inventory control, distribution and transportation.