

Australian Capital Territory

The Australian National University

LP0775541 Prof DG Byrne; Prof RD Telford

Approved Project Title **The effect of physical activity and a structured exercise program on the psychological and physical development of Australian primary school children**

2007 : \$ 71,006

2008 : \$ 71,006

2009 : \$ 71,006

Primary RFCD 3214 HUMAN MOVEMENT AND SPORTS SCIENCE

Collaborating/Partner Organisation(s)

Commonwealth Institute

Administering Organisation The Australian National University

Project Summary

This study will explore the effects of early childhood physical activity on development. Our study will assess quantitatively the beneficial effects of exercise on personal and physical growth in young children in a non-intimidating way using a specifically designed exercise program.

LP0775245 Prof JM Corbett; Prof CC Findlay

Approved Project Title **Setting Priorities for Services Trade Reform**

2007 : \$ 100,000

2008 : \$ 100,000

2009 : \$ 100,000

Primary RFCD 3402 APPLIED ECONOMICS

Collaborating/Partner Organisation(s)

Productivity Commission

Administering Organisation The Australian National University

Project Summary

Services could be a deal maker in the Doha Round of trade negotiations, and Australia has much to gain if developing countries can be persuaded to make commercially meaningful commitments to liberalise services trade. Australia will also gain if the economies of the region are strengthened through regulatory reform. And Australia can gain from further regulatory reform at home. To these ends, the project will provide new understanding of regulatory best practice that will reveal the priorities for services trade reform.

LP0775058 Prof Dr R Grun; Prof SG Webb; Dr AS Fairbairn; Dr EJ Rhodes; Dr N Stern

Approved Project Title **Environmental Evolution of the Willandra Lakes World Heritage Area**

2007 : \$ 229,739

2008 : \$ 151,312

2009 : \$ 189,833

Primary RFCD 2601 GEOLOGY

APA(I) Award(s): 1

Collaborating/Partner Organisation(s)

Department of Conservation and Environment

Three Traditional Tribal Groups

Administering Organisation The Australian National University

Project Summary

The Willandra Lakes World Heritage Area ranks as the most significant area for documenting Australia TMs unique cultural and environmental history. Parts of this remarkable archive are being lost through erosion. This project is the basis for a strategic research alliance between the custodians and managers of the area and leading Australian research institutions to build a picture of the continent TMs human and environmental history before this evidence is irretrievably lost. Lake Mungo is known to Australians as the site of the world TMs earliest cremation and a window into our remote past. We will provide novel insights into the evolution of the Australian landscape, its fragile environment and the history of its resilient inhabitants.

Summary of Linkage Projects Proposals for Funding to Commence in 2007

LP0775017 Prof NA Gunningham

Approved Project Title **Internal Regulation: Overcoming the Disconnect between Corporate Objectives and Health, Safety, Environmental and Community Performance.**

2007 : \$ 73,000

2008 : \$ 75,000

2009 : \$ 55,000

Primary RFCD 3901 LAW

Collaborating/Partner Organisation(s)

Anglo Coal Australia

Administering Organisation The Australian National University

Project Summary

This research will enable corporations to identify the points of greatest leverage over corporate and facility level health, safety, environmental and community (HSEC) performance and to develop strategies that successfully achieve their HSEC objectives. It will provide broader national benefits in (i) reducing workplace injury and environmental degradation at multiple facilities across Australia and (ii) increasing productivity and economic benefits (by doing so at reduced cost to companies). The study will also benefit the Australian and regional communities by identifying strategies that facilitate better community-company relations.

LP0775444 Prof R Jha; Dr S Howes

Approved Project Title **Social Safety Nets in India: Effectiveness, Nutritional Impact and Political Economy**

2007 : \$ 140,000

2008 : \$ 145,000

2009 : \$ 150,000

Primary RFCD 3402 APPLIED ECONOMICS

Collaborating/Partner Organisation(s)

AusAID

Administering Organisation The Australian National University

Project Summary

India is, potentially, one of Australia's most significant trading and strategic partners. As India, a democratic country with low per capita income deepens its economic reforms programs, their success depends critically upon domestic political support which would require that the policies adopted make a significant dent on poverty. The proposed research will examine the impact of two of the most significant policy initiatives for poverty alleviation and thus provide critical analyses of how a democratic polity should address poverty. The project's results will also have significant implications for the design of AusAID's recommended anti-poverty interventions in other developing countries.

LP0775395 Dr PC John; Dr E Perotti; Dr DA Jones; Dr O Leblanc

Approved Project Title **Isolation and characterization of genes regulating female reproductive organ development in plants.**

2007 : \$ 96,751

2008 : \$ 96,751

2009 : \$ 96,751

Primary RFCD 2701 BIOCHEMISTRY AND CELL BIOLOGY

Collaborating/Partner Organisation(s)

Groupe Limagrain

Pioneer Hi-Bred Intl

Syngenta Seeds Inc.

Administering Organisation The Australian National University

Project Summary

Genes that regulate female reproductive organ development are of immense value for Australia as tools for seed improvement. Those from our preliminary screen have convinced our industry partners that they can be agents for engineering of apomixis or creation of fertile seed without fertilisation. This will allow the capture of hybrid vigour in wheat and rice, for which commercial hybrid seed production is not currently available. In wheat alone, apomixis presents for Australia an economic value of more than Aus\$ ½ billion per annum. Furthermore, controlled apomixis will accelerate breeding programs that will bring drought resistance and minimal fertiliser requiring varieties to the farmer.

Summary of Linkage Projects Proposals for Funding to Commence in 2007

LP0775392 Dr ID Keen; Prof C Lloyd; Dr AJ Redmond; Dr MP Pickering

Approved Project Title **Indigenous participation in the Australian colonial economy: an anthropological and historical investigation.**

2007 : \$ 45,000

2008 : \$ 44,000

2009 : \$ 50,000

Primary RFCD 3703 ANTHROPOLOGY

APA(I) Award(s): 1

Collaborating/Partner Organisation(s)

National Museum of Australia

Administering Organisation The Australian National University

Project Summary

The main benefits of the research to the Nation and community lie in the new information generated by the project, and the enhancement of our understanding of past relations between Indigenous people and the wider community. The proposal has the potential to mediate the extreme positions in the 'history wars' by investigating the various types of accommodation and mutuality of interests which informed many early encounters on and beyond the frontier. It will also widen the focus of settler-Indigenous relationships from those between Indigenous people and Anglo-Celtic Australians to include relations with other ethnicities including Afghani settlers.

LP0775461 Mr JC Reid; Dr RG Lamberts; Mr L Kirk

Approved Project Title **Engaging Visions: Configuring a model for cultural practitioners to assist catchment communities in addressing natural resource management issues.**

2007 : \$ 114,044

2008 : \$ 100,506

2009 : \$ 95,124

Primary RFCD 4102 VISUAL ARTS AND CRAFTS

APA(I) Award(s): 1

Collaborating/Partner Organisation(s)

Murray-Darling Basin Commission

Administering Organisation The Australian National University

Project Summary

Communities need new approaches to complex natural resource management issues. To achieve environmentally sustainable practices society not only requires reliable information but also the motivation for its uptake. Configuring an effective model for cultural production and distribution will inspire innovative cultural practice and enhance community natural resource management. The Project draws upon, and contributes to, the national and multi-State mandates of both Project partners. The Project, and the partner Investment Plan it will inform, contributes to National Priority 1, An Environmentally Sustainable Australia, and Priority Goal 1, Water - a critical resource.

Summary of Linkage Projects Proposals for Funding to Commence in 2007

LP0774896 Dr AP Rendell; Dr PE Strazdins; Dr MJ Frisch; Dr GW Trucks; A/Prof S Chong-Wee See

Approved Project Title **Programming Paradigms, Tools and Algorithms for Electronic Structure Calculations on Clusters of Non-Uniform Memory Access Parallel Processors**

2007 : \$ 85,000
2008 : \$ 85,000
2009 : \$ 70,000

Primary RFCD 2803 COMPUTER SOFTWARE

APA(I) Award(s): 1

Collaborating/Partner Organisation(s)
Gaussian, Inc.
Sun Microsystems

Administering Organisation The Australian National University

Project Summary

In recent years Australian academia has invested heavily in high performance computing systems. A significant fraction of these resources are devoted to performing computational chemistry studies, such as those used in drug design. This project links Australian researchers with the company responsible for a particularly widely used computational chemistry application package, and also with a major international computer company. Our aim is to substantially improve the performance of this code on cluster based compute systems. This, as well as our generic performance evaluation tools, would be of substantial benefit to the Australian research community. The project will forge links with researchers in Singapore, Japan and the USA.

LP0774918 Dr RG Schwab; Ms IB Kral; Ms UJ Raymond

Approved Project Title **Lifespan learning and literacy for young adults in remote Indigenous communities**

2007 : \$ 117,000
2008 : \$ 114,000
2009 : \$ 77,030

Primary RFCD 3703 ANTHROPOLOGY

APDI Ms IB Kral

Collaborating/Partner Organisation(s)
Fred Hollows Foundation

Administering Organisation The Australian National University

Project Summary

Engagement with learning across the lifespan and increased literacy skills among early school leavers and other young adults will have direct benefits to remote Indigenous communities and to the nation. These include the increased ability of this next generation of Indigenous adults to develop the skills and confidence required to actively build stable and self-reliant institutions, improve social and economic circumstances and enhance the health of their families and communities. Additional benefits will flow from the enhanced capacity of individuals to participate effectively in the national economy and from more positive spending of public funds on evidence-based programs that work rather than ongoing problem alleviation.

LP0775133 Dr L Song; Prof RG Garnaut

Approved Project Title **China's Industrialisation and Demand for Energy and Minerals**

2007 : \$ 155,000
2008 : \$ 43,000

Primary RFCD 3402 APPLIED ECONOMICS

Collaborating/Partner Organisation(s)
Rio Tinto Limited

Administering Organisation The Australian National University

Project Summary

Understanding China's medium and long-term growth prospects and the implications for both demand and supply of resources are critically important to Australian economic policy and performance, as well as to investment decisions of Australian resource producers, and professional decisions of Australians in a wide range of occupations. Analysis of the medium and long-term demand for resources from China would be beneficial for Australian resource industries. It is also important to Australian budget, education and infrastructure policy. Increasing Chinese demand for resources will be critical in shaping global environmental policies.

Summary of Linkage Projects Proposals for Funding to Commence in 2007

LP0775290 Prof JG Uhr

Approved Project Title **Strengthening Parliamentary Institutions: Australia in Comparative Perspective**

2007 : \$ 127,309

2008 : \$ 86,000

2009 : \$ 94,000

Primary RFCD 3601 POLITICAL SCIENCE

Collaborating/Partner Organisation(s)

Dept of the Senate

Department of the House of Representatives

Administering Organisation The Australian National University

Project Summary

Australia has a valuable international record as a parliamentary democracy, with much to teach, as well as much to learn from, the international community about effective parliamentary institutions. This joint ANU-Commonwealth Parliament project will be based at the ANU's new Parliamentary Studies Centre and managed by that Centre's inaugural director, Professor John Uhr. The project will greatly strengthen the intellectual and policy framework of Australia's democracy assistance in the Asia Pacific region.

LP0774909 Prof JW White; Prof M Augustin; Dr TJ Wooster

Approved Project Title **Milk protein denaturation and stabilisation at surfaces**

2007 : \$ 80,000

2008 : \$ 75,000

2009 : \$ 75,000

Primary RFCD 2599 OTHER CHEMICAL SCIENCES

Collaborating/Partner Organisation(s)

Dairy Ingredients Group of Australia Ltd

Administering Organisation The Australian National University

Project Summary

The Australian Dairy Industry, valued at \$2.8 billion in 2003-4, is ranked third among rural industries in Australia. Australia exports over 50% of its annual milk production, contributing to 13% of world trade. Exports of dairy products are valued at \$2.4 billion. In order for Australia to maintain this position, Australia needs to keep up with its major competitors by ensuring quality and consistency of dairy products is maintained, and by developing new applications and innovative products. The proposal expects to recruit an exceptional young Australian graduate - a former Rhodes Scholar from Oxford University.