

Summary of *Linkage Learned Academies Special Projects* for Funding to Commence in 2010

The Academy of the Social Sciences in Australia

LS01000001 Prof MP Bittman; DH Broom; DS Ironmonger; S Richardson; L Strazdins; B Rodgers; J Nicholson; M Clements; R D'Souza; S Charlesworth; G Whitehouse; M Baird

Approved Project Title **Children of the recession: the social consequences of an economic downturn**

2010: \$ 110,000
2011 \$ 100,000
2012 \$ 90,000

Project Summary

This project exploits an opportunity provided by the Global Financial Crisis. It assembles an interdisciplinary team to study the effects of the severity of the downturn on family income and employment, non-market production, family functioning and child well-being in Australia, the U.S. and the U.K. It will improve the evidence base for formulation of policy, provide important evidence about different policy settings in aiding recovery, and allow for better targeting of welfare expenditure. It will also demonstrate the practical value of advances in social science knowledge and provide valuable training and opportunities for early and mid career scholars.

The Australian Academy of the Humanities

LS01000002 Prof J Lo Bianco; G Clarke; J Byron; C Parolin

Approved Project Title **Humanities connections: new activities to support professional development, closer collaboration, improved research application outcomes, and policy research in the humanities**

2010: \$ 75,000
2011 \$ 75,000
2012 \$ 75,250

Project Summary

The proposal aims to extend the reach of the humanities to improve practical outcomes for humanities scholars, the research sector and the national interest. The proposal has three main strands: a professional development programme for early and mid-career researchers; network development to support and extend sector cooperation; and applied policy development to improve knowledge and reach of Australian humanities scholarship. The priority areas for network building and policy improvement identified so far include: humanities discipline development; the Australian eHumanities; international humanities policy collaboration; university language education and scholarship; and interdisciplinary and applied research in the humanities.

The Australian Academy Science

LS1000003 Prof K Lambeck; J Finnigan; M Raupach; B Walker; A McMichael; J Quiggin

Approved Project Title **Australia 2050: achieving an environmentally sustainable and socially equitable way of living**

2010 \$ 110,000
2011 \$ 100,000
2012 \$ 105,000

Project Summary

Australia's predicted population increase of 60% by 2050 could profoundly affect the nation's environmental sustainability and social equity. The proposed research program will employ the *Dahlem* Workshop Model, an established methodology to facilitate interdisciplinary communication and cross-disciplinary cooperation, to examine four interrelated themes: population, biogeochemical cycles and biodiversity, connectivity and societal and individual aspirations. The objective is to provide input to informed policy making regarding the critical thresholds that may define Australia's safe biophysical and ecological 'operating space'.

Summary of *Linkage Learned Academies Special Projects* for Funding to Commence in 2010

Australian Academy of Technological Sciences and Engineering

LS1000004 Prof P Laver; C Hooker; S Macintyre; R Williamson

Approved Project Title Making interdisciplinary research work – achieving a sustainable Australia

2010 \$ 76,000

2011 \$ 100,000

2012 \$ 108,000

Project Summary

This multivalent program of research is designed to address two outstanding problems, one a key issue in research management, the other a national challenge. The former is the application of interdisciplinary research to the broad, problem-based research agendas of today and tomorrow. The latter issue – addressed as a test case for the methodological work conducted in the first part of the program - is how to use this understanding to find effective ways of approaching the array of challenges confronting Australia in growing our population, sustaining our way of life and our living standards, reducing our burden on the environment, promoting social harmony in a context of diversity, and advancing our nation's role as a leader in the global community.

Australian Academy of Technological Sciences and Engineering

LS1000005 Prof JC Radcliffe; TB Connor; MH Thomas; NJ Sligar; MA Sargent; GI Pearman

Approved Project Title Green growth in Australia: examining the linkages within – and potential of – sustainable resources management to enable environmentally responsible economic growth.

2010 \$ 110,000

2011 \$ 100,000

2012 \$ 105,000

Project Summary

Green Growth – with underlying drivers of population, social, agricultural, economic and environmental dynamics – will pose technological challenges to resource security. Critically, this approach to sustainable economic progress must address competition for resources. Historically, energy, environmental and water issues have been examined separately. They are, however, fundamentally interconnected via a complex web of interactions. Finding solutions to resource issues without impeding economic development will require new integrative, interdisciplinary approaches and technologies (e.g. smart grids). The project will examine the interconnectivity of major resources, their role in securing Australia's future prosperity and new methods and technologies designed to optimise their use.