

New South Wales

The University of Newcastle

FT0991231 Dr V Haskins

Approved Project Title **In Her Place: state intervention and Indigenous domestic service in Australia and the United States, 1880-1945**

2009 : \$ 85,800
2010 : \$ 171,600
2011 : \$ 171,600
2012 : \$ 171,600
2013 : \$ 85,800

Primary RFCD 4301 HISTORICAL STUDIES

Administering Organisation The University of Newcastle

Project Summary

As a transnational history of Indigenous domestic labour and government intervention, this project positions Australian scholarship at the forefront of major research initiatives in gender, race and colonialism studies, promoting Australian research among the international community of scholars. More importantly, by increasing public awareness of the complexity of race relations history in our society, and taking understanding beyond the confines of a purely national outlook, this project contributes to ongoing efforts to address, come to terms with, and indeed learn from the more traumatic aspects of our history, in positive and constructive new ways.

FT0990651 Prof SO Moheimani

Approved Project Title **Advanced model-based control for ultra-fast and ultra-high-precision nanoscale positioning**

2009 : \$ 111,400
2010 : \$ 222,800
2011 : \$ 222,800
2012 : \$ 222,800
2013 : \$ 111,400

Primary RFCD 2903 MANUFACTURING ENGINEERING

Administering Organisation The University of Newcastle

Project Summary

Australia faces unique challenges due to its small population and distance from international markets. To maintain a high standard of living Australia needs to further develop its high-tech base particularly in emerging fields such as nanotechnology. This research program is aimed at placing Australia at the forefront of international research in nanoscale positioning systems by building a world-class team of talented researchers and equipping them with world-class research infrastructure. The global market for nanotechnology is projected to be in the tens of billions of dollars by 2020. The proposed research will enhance Australia's competitive advantage through high-impact scientific and technological innovations in nanotechnology.

FT0991309 Prof MJ Oswald

Approved Project Title **Complex and nonlinear pattern analysis in architectural space, form and program: developing computational tools to support social and cultural design.**

2009 : \$ 111,400
2010 : \$ 222,800
2011 : \$ 222,800
2012 : \$ 222,800
2013 : \$ 111,400

Primary RFCD 3101 ARCHITECTURE AND URBAN ENVIRONMENT

Administering Organisation The University of Newcastle

Project Summary

In a country that is experiencing increasing urban density there is an urgent need for the development of tools and models for the production of socially and culturally responsive environments. The Fellowship develops a new quantitative and qualitative understanding of the experiential and semiotic characteristics of buildings. The project, assisted by developments in robotics technology, produces a leading-edge computational model for analysing complex and non-linear patterns in architectural space, form and program from a social and cultural perspective. Such a model will assist design practitioners, scholars, town planners and policy writers to shape rich, responsive and inclusive architectural environments.

Summary of ARC Future Fellowships Proposals for Funding to Commence in 2009

FT0991128 Dr MW Parsons

Approved Project Title **Prediction of tissue fate and functional outcome in acute ischemic stroke with advanced imaging analysis - experimental validation and translational studies**

2009 : \$ 85,800
2010 : \$ 171,600
2011 : \$ 171,600
2012 : \$ 171,600
2013 : \$ 85,800

Primary RFCD 3210 CLINICAL SCIENCES

Administering Organisation The University of Newcastle

Project Summary

Stroke is predominantly a disease of ageing and the commonest cause of adult disability. In Australia, 55,000 people have a stroke each year (>80% are over age 65). The total number of strokes per year worldwide will rise 60% within the next two decades as the proportion of elderly in our population increases. This research will improve brain imaging selection for acute stroke therapies in clinical trials and practice. Better acute stroke therapies limit the size of brain damage from stroke and reduce long-term disability. Thus, this research will directly translate into allowing our population to 'age well and productively'.