

New South Wales

University of Western Sydney

DP0772441 Prof CT Best; Dr CM Kitamura; Prof G Docherty; Prof W Labov

Approved Project Title **How Strict is the Mother Tongue? Using Dialects to Probe Early Speech Perception and Word Recognition.**

2007 : \$122,000
2008 : \$130,000
2009 : \$239,000
2010 : \$20,000

Primary RFCD 3802 LINGUISTICS

Administering Organisation University of Western Sydney

Project Summary

This project will 1) advance knowledge of toddler word representations and their developmental precursors; 2) contribute to theories of phonological vs phonetic properties of spoken language; 3) explain how experience with the ambient language shapes children's phonological and lexical development. Moreover, the findings will 4) offer crucial new insights into sources of developmental disorders (language delay, dyslexia) leading to improved early diagnosis and treatment; 5) bear on issues of second language learning; and by understanding the process by which young learners handle dialect variability, 6) provide insights into how automatic speech recognition systems can be made more robust to dialectal and foreign accent differences.

DP0774024 Prof RI Hodge

Approved Project Title **Putting humanities to work in a chaotic world: dynamic interdisciplinarity and community engagement**

2007 : \$80,000
2008 : \$107,000
2009 : \$110,000

Primary RFCD 4203 CULTURAL STUDIES

Administering Organisation University of Western Sydney

Project Summary

This project will rethink theories and methods in humanities and social sciences so that they can make a more direct contribution to the community. It will build stronger interdisciplinarity across these various fields. It will incorporate ideas from science, from chaos theory, to make it more powerful and science-friendly. It will develop the new theory out of a series of strategic collaborations with local government, industry and community players, around critical incidents. This will be new theory, but with strong links with existing disciplines, offering good humanities and social science academics methods and models for a more engaged research.

DP0773265 Prof IR Indyk; Mr JF Arnold; Dr MR Davis; Prof DJ Carter; Ms L Poland

Approved Project Title **Australian literary publishing and its economies, 1965-1995**

2007 : \$245,000
2008 : \$185,200
2009 : \$204,950

Primary RFCD 4202 LITERATURE STUDIES

APD Ms L Poland

Administering Organisation University of Western Sydney

Project Summary

Australian literature is an essential aspect of Australian culture but its viability is currently under threat, both in the marketplace, and in tertiary and secondary education, where its coherence and relevance as a discipline has diminished over the past decade. Because it explores the different inputs that make for a vital literary culture, some of them intangible or discrete in their operation, the project will contribute to a better understanding of how this culture works, and to a renewed confidence in its ability to sustain itself by commercial and non-commercial means.

Summary of Discovery Projects Proposals for Funding to Commence in 2007

DP0772335 Dr CP McGregor

Approved Project Title **Multi-dimensional Temporal Abstraction to Support Neonatal Clinical Research**

2007 : \$42,081

2008 : \$45,303

Primary RFCD 3212 PUBLIC HEALTH AND HEALTH SERVICES

Administering Organisation University of Western Sydney

Project Summary

Each year, the death of a baby causes grief for thousands of Australian parents, contributes to depression and considerable anxiety in the population. In this work we propose procedures that will significantly reduce this unhappy scenario. The availability of a complex trend and pattern analysis will give Neonatologists access to predictive clinical analysis that has not previously been available locally or internationally. Thus, significant benefits in terms of lower mortality rates and lower long-term disability rates among babies requiring special care is possible. This research will provide the basis for future projects that will support regional hospitals.

DP0773385 A/Prof AJ Moore

Approved Project Title **A study of right-wing movements during Australia's Great Depression**

2007 : \$30,000

2008 : \$31,148

2009 : \$21,148

Primary RFCD 4301 HISTORICAL STUDIES

Administering Organisation University of Western Sydney

Project Summary

This project studies the social roots of political extremism in Australia and seeks to explain why decent, law-abiding citizens joined organisations like the New Guard which flouted the conventions of liberal, parliamentary democracy. The project will provide historical context for understanding contemporary right-wing political violence. In studying the transformation of a organisation whose initial objectives were civic and high-minded into a terrorist organisation that contemplated mounting a coup against a democratically elected government, the project will seek to shed light on why 'ordinary people' embraced 'home grown terrorism'.

DP0771890 A/Prof CJ Stevens; Dr IR Cross; Prof WF Thompson

Approved Project Title **Music, Arousal, and Mood: The Role of Loudness and Loudness Change in Cross-Cultural Music Perception**

2007 : \$69,000

2008 : \$52,000

2009 : \$60,000

Primary RFCD 4101 PERFORMING ARTS

Administering Organisation University of Western Sydney

Project Summary

Despite decades of research into perception of Western music there are no studies applying experimental methods to perception of traditional Australian music. This project investigates a parameter present in all auditory events, from animal songs and alarms to music and speech: loudness. Results concerning the universality of loudness change and effects on mood and arousal will be reported to academic and local communities. Understanding how people experience loudness has implications for non-musical uses of sound, eg. more effective uses of loudness in non-verbal auditory warnings. Identifying effects of loudness on arousal and mood is also relevant to research on therapeutic or harmful effects of music and other sounds.

Summary of Discovery Projects Proposals for Funding to Commence in 2007

DP0774701 A/Prof WX Zheng; Prof E Bai; Prof Y Zheng

Approved Project Title **Development of Identification Methods for Nonlinear Dynamical Systems**

2007 : \$50,000

2008 : \$50,000

2009 : \$50,000

Primary RFCID 2301 MATHEMATICS

Administering Organisation University of Western Sydney

Project Summary

It is widely recognized that nonlinear systems theory will mark a new era of control science in the coming decade, and will be used in various types of applications. Driven by such immense opportunities and needs, identification of nonlinear systems is emerging as a vital, active area of research. The success of this project will enhance Australia's leading role in the international control community. The training of the postdoctoral research associates will generate the expertise needed to maintain the involvement of the coming generation in cutting-edge technological advancement. The project will strengthen research activities in Australia through strong international collaborations.