

Summary of Linkage Infrastructure, Equipment and Facilities Proposals by State and Organisation

Queensland

The University of Queensland

LE100100079 Prof Richard A Fotheringham, Prof Joanne E Tompkins, Prof David J Carter, Prof Thomas A O'Regan, Prof Jane L Hunter, Prof Kerry M Mallan, Prof Annette J Patterson, A/Prof Cheryl M Taylor, Em/Prof Elizabeth A Webby, Prof Dennis J Haskell, A/Prof Van G Ikin, Prof Philip Mead, Dr Kate Douglas, Ms Kerry M Kilner, Prof Leigh Dale, Prof Wenche Ommundsen, Mr Martin Borchert, Prof Gillian L Whitlock, Prof Paul R Eggert, Dr Toni M Johnson-Woods, Prof Robert W Dixon, Mr Ross H Coleman, Dr Elizabeth N McMahon, Em/Prof Bruce H Bennett, Mr John F Arnold, A/Prof Tracey A Bunda, Dr Ernie Blackmore, Ms Roslyn M Follett

Approved Project Title eResearch Infrastructure for Humanities Scholars: Facilitating literary and narrative studies; children's and popular fictions and film/TV studies

2010 \$520,000.00

Primary FoR 2005 LITERARY STUDIES

Partner/Collaborating Organisation(s)

James Cook University, Monash University, Queensland University of Technology, The Flinders University of South Australia, The University of New South Wales, The University of Sydney, The University of Western Australia, University of Wollongong

Administering Organisation The University of Queensland

Project Summary

AustLit provides enhanced information about Australian narrative cultures to all researchers and information seekers throughout Australia and internationally. It serves the needs of students, teachers and academic researchers at all levels studying in the broad area of Australian literary and narrative cultures. The proposed developments in 2010 will further enhance AustLit's value to many Australian communities with interests in Australian literary, audio-visual and critical narratives. Its multi-dimensional approach to research support and facilitation ensures that it is connected to most current activity in the field and thereby continues to accrue benefits to the whole community as it develops.

LE100100226 Prof Richard J Lewis, Prof Matthew A Cooper, Prof David P Fairlie, Prof David J Craik, Prof Robert J Capon, Prof Paul F Alewood, Prof Glenn F King, Prof Kirill Alexandrov, Prof David J Adams, Prof Emilio Badoer, Prof Irena Cosic, Prof Philip Poronnik

Approved Project Title Advanced molecular discovery and characterisation facility

2010 \$424,000.00

Primary FoR 0304 MEDICINAL AND BIOMOLECULAR CHEMISTRY

Partner/Collaborating Organisation(s)

RMIT University

Administering Organisation The University of Queensland

Project Summary

Natural product drug discovery in Australia requires access to high throughput functional assays to guide the separation and of novel bioactives with therapeutic potential. By establishing the advanced molecular discovery and characterisation facility in an academic environment across two institutions, research programs in early drug lead discovery and characterisation will be accelerated. It will provide unique capabilities not currently available in Australia, and help Australian researchers remain internationally competitive in breakthrough science and frontier technologies. The research enabled by this facility will lead to development of new drug candidates by the emerging Australian biotechnology industry.

Summary of Linkage Infrastructure, Equipment and Facilities Proposals by State and Organisation

LE100100220 Prof Emmanuel V Manlapig, Dr Feng Nian Shi, A/Prof Daniel Fornasiero, Dr Seher Ata, Prof Peter J Scales

Approved Project Title **A study of the bulk and surface responses of ores to high voltage pulses applied using a selfFrag Lab**

2010 \$200,000.00

Primary FoR 0914 RESOURCES ENGINEERING AND EXTRACTIVE METALLURGY

Partner/Collaborating Organisation(s)

The University of Melbourne, The University of Newcastle, University of South Australia

Administering Organisation The University of Queensland

Project Summary

Minerals account for 40% of Australia's exports and mining is a major Australian employer. The health of the industry is integral to Australia's prosperity. Recent events have shown that mining cannot rely on high commodity prices but must continually seek efficiency improvements. This will be even more critical as production depends increasingly on low-grade ore deposits. Using selfFrag Lab, the response of different ores to high voltage pulses will be studied to identify processes that liberate a greater percentage of valuable minerals while using less energy and less water and keeping toxic elements bound in larger waste particles. SelfFrag-based research will therefore deliver major economic and environmental benefits to Australia.

LE100100074 Prof David C Reutens, Prof Alan Mackay-Sim, Prof Perry F Bartlett, Prof George Paxinos, Prof Glenda M Halliday, Prof Charles R Watson

Approved Project Title **Facilities for automated high-throughput slide scanning and stereology**

2010 \$520,000.00

Primary FoR 1109 NEUROSCIENCES

Partner/Collaborating Organisation(s)

Griffith University, The University of New South Wales

Administering Organisation The University of Queensland

Project Summary

The equipment requested will facilitate the work of the Australian Mouse Brain Mapping Consortium, a consortium of Australian research groups collaborating to provide the only mouse model brain mapping capability in the country. The consortium brings together laboratory, neuroimaging and computational expertise in a comprehensive framework for imaging the mouse brain. This will help researchers to study mouse models of genetic and acquired disorders across the life-span. Remote viewing and analysis capabilities will help overcome the 'tyranny of distance', increasing national access to the facility. Repositories of digitised images will increase the availability of valuable research material to other Australian and international researchers.