

**Victoria**

**La Trobe University**

**FT0991801** Dr LR Bennett

**Approved Project Title** **Compromised fertility in contemporary Indonesia**

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

**Primary RFGD** 3210 CLINICAL SCIENCES

**Administering Organisation** La Trobe University

**Project Summary**

This project will benefit the community by informing service provision for infertility treatment, and by identifying the potential for prevention strategies. It will consolidate Australia's position at the forefront of research into assisted reproductive technologies, through the extension of this expertise to our near neighbours. It will contribute to the current gap in knowledge of infertility in Southeast Asia and in developing countries more broadly, and advance research on infertility conducted from human rights and anthropological perspectives. The project will reinforce the relevance of the United Nations definition of reproductive health, for all people regardless of whether they live in highly or lesser developed nations.

**FT0991923** Dr SM Cutts

**Approved Project Title** **Improvement of anthracycline chemotherapy by enhancement of apoptotic responses and tumour targeted activation**

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

**Primary RFGD** 3203 MEDICAL BIOCHEMISTRY AND CLINICAL CHEMISTRY

**Administering Organisation** La Trobe University

**Project Summary**

Improved outcomes for anthracycline anticancer chemotherapy is of clear benefit to the nation. Tumour-localised treatment is expected to lead to improved responses, reduced side-effects and improved quality of life while rational selection of drug combinations is expected to enable treatment of tumours that were previously resistant to anthracyclines. With an aging population in Australia the incidence of cancer is predicted to rise dramatically - improved treatment outcomes and better use of chemotherapeutics will be of obvious national benefit. The development of new tumour-targeted agents is the subject of joint Intellectual Property between Australia and the USA, offering potential economic benefit.

**FT0991464** Dr CJ Hawkins

**Approved Project Title** **Apoptotic signalling in virally infected and normal cells.**

**2009 :** \$ 98,600  
**2010 :** \$ 197,200  
**2011 :** \$ 197,200  
**2012 :** \$ 197,200  
**2013 :** \$ 98,600

**Primary RFGD** 2701 BIOCHEMISTRY AND CELL BIOLOGY

**Administering Organisation** La Trobe University

**Project Summary**

Viral diseases contribute substantially to mortality and morbidity, in Australia and internationally. Emerging viral diseases, including H5N1 avian influenza, have the potential to severely impact on human health and the global economy. Concerns also exist that viruses may be used as bioweapons. This project seeks to define the mechanisms by which cell death occurs and is regulated in healthy cells, and how this is altered in virally infected or oncogenically transformed cells. Outcomes of this work may contribute to development of novel anti-cancer and anti-viral therapies, diagnostic reagents and vaccines.

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

**FT0991412** Prof Dr B Hellwig

**Approved Project Title** **Semantic categories: Exploring the history of the Baining languages of Island Melanesia**

**2009 :** \$ 85,800  
**2010 :** \$ 152,600  
**2011 :** \$ 127,600  
**2012 :** \$ 121,600  
**2013 :** \$ 60,800

**Primary RFCD** 3802 LINGUISTICS

**Administering Organisation** La Trobe University

### Project Summary

The project adds to our knowledge of the historical, linguistic and ethnic relationships within Island Melanesia, thus contributing directly to our understanding of the complexities of this region. This regional focus expands Australia's expertise in Melanesian research, and reaffirms Australia's leading position in this area. Such expertise attracts outstanding international students and researchers to Australia, strengthens the Australian research community, and increases the international visibility of Australian-based research. Furthermore, studying semantic categories provides a unique insight into how speakers of different languages categorise the world around and within them, thereby facilitating intercultural understanding.

**FT0990683** Dr H Puthalakath

**Approved Project Title** **Studies on the regulation of the pro-apoptotic protein Bim in mammalian development and cancer.**

**2009 :** \$ 98,600  
**2010 :** \$ 197,200  
**2011 :** \$ 197,200  
**2012 :** \$ 197,200  
**2013 :** \$ 98,600

**Primary RFCD** 2701 BIOCHEMISTRY AND CELL BIOLOGY

**Administering Organisation** La Trobe University

### Project Summary

This project is aimed at understanding the regulation of a gene, which is a tumour suppressor and is often mutated or down regulated in many different forms of cancers. A better understanding of how this gene works may eventually lead to better therapeutics to treat these cancers. This is relevant in the Australian context given that our aging population and obesity epidemics (the link between obesity, insulin resistance and various forms of cancers is well established) are leading to a rapid increase in new cancer cases, thus driving a rapid increase in demand for better treatments. This is particularly relevant in Indigenous health where obesity is on the rise following the transition from a traditional to an urban lifestyle.

**FT0992258** Dr C Smith

**Approved Project Title** **Molecular Archaeology: Carbon isotope analysis of amino acids as a means to investigate diets, physiology, metabolism and palaeoenvironment.**

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

**Primary RFCD** 4302 ARCHAEOLOGY AND PREHISTORY

**Administering Organisation** La Trobe University

### Project Summary

The investigation of the bones of past societies and animals at the molecular level opens up a whole array of alternative data about palaeodiet and environment. Investigating the past in this way provides a unique perspective about how diet and health have changed in humans and about how animals and the environment have changed. When we understand the past in this manner we can better understand current health issues linked to diet and how the environment and climate is changing.

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

**FT0992033** Dr KN Truscott

**Approved Project Title** Mitochondrial proteases and their contribution to protein homeostasis

**2009 :** \$ 85,800

**2010 :** \$ 171,600

**2011 :** \$ 171,600

**2012 :** \$ 171,600

**2013 :** \$ 85,800

**Primary RFCD** 2701 BIOCHEMISTRY AND CELL BIOLOGY

**Administering Organisation** La Trobe University

### Project Summary

This research will examine how a critically important cellular organelle known as the mitochondrion maintains its functional integrity by sensing and signalling protein perturbations. As mitochondrial dysfunction is central to a number of neurodegenerative diseases understanding the molecular biology of this fundamentally important cellular process could, in the future, provide for better health outcomes for an aging Australian population. The training of post-graduate students is an integral component of this study and thus will contribute to building national research capacity. International collaborations and new discoveries will also contribute to the recognition of Australian research.