Victoria’s researchers are partnering with industries, communities and governments to improve critical computer systems used for air traffic control, develop a novel vaccine for liver fluke disease and advance new wireless transceivers for the next generation of wi-fi.

This research and more is being supported by a $31,123,789 investment in 90 new Victorian research projects under the ARC Linkage Projects scheme. The funding is part of $101,809,345 million being awarded to Australian universities for 306 new research Linkage Projects to start in July 2013.

Some examples of the Victorian projects are provided below.

To view the summaries of all funded projects and more information on the Linkage Projects funding scheme, visit the outcomes page of the ARC website.

Partner organisations must make a significant contribution (equal to, or greater than, ARC funding), in cash and/or in kind, to the project.

### A new spectrum access technology for future wireless terminals (LP130100711)

This project will develop a new frequency flexible wireless transceiver structure for the next generation of smartphones and wireless devices. The project will improve the roaming experience of travellers and reduce the cost of wireless connectivity, enabling new applications such as machine-to-machine communications and the internet-of-things.

**$210,000**

**Victoria University**

**Lead Chief Investigator:** Professor Michael Faulkner

**Partner Organisations:**

Ericsson AB, Telstra, STMicroelectronics Inc.

**University media number:** 03 9919 4322

### Formal modelling and analysis of software requirements for air traffic management systems for improved integrity assurance (LP130100201)

This project will significantly reduce the time and cost of developing software for critical applications such as aviation and air traffic management. As well as improving the trustworthiness of safety critical computer-based systems, this project will also enable system improvements to be deployed faster and more reliably.

**$260,000**

**Swinburne University of Technology**

**Lead Chief Investigator:** Professor John Grundy

**Partner Organisations:** Thales Australia Ltd, Dendronix Pty Ltd

**University media number:** 03 9214 5737 or 0432 754 232

### Enhancing adolescent mental health through positive education (LP130100357)

Positive education is a preventative, strengths-based approach to address the mental health needs of young people in schools. This project will use innovative methods to examine the contribution of positive education to adolescent mental health, and to social and learning outcomes; and will also guide effective and widespread dissemination of positive education, more generally.

**$383,740**

**The University of Melbourne**

**Lead Chief Investigator:** Dr Dianne Vella-Brodick

**Partner Organisations:** Geelong Grammar School, Northern Bay P-12 College

**University media number:** 03 8344 6937 or 0432 754 232
Exploiting high resolution images of the retina to customise vision tests (LP130100055)

This project will make vision tests more accurate and faster by using a person’s individual eye anatomy to customise the test. The basic understandings discovered in this project are expected to be applied in clinical and research settings thus saving sight, dollars and time.

$206,000
The University of Melbourne

Lead Chief Investigator:
Associate Professor Andrew Turpin

Partner Organisations:
Optech Diagnostic & Surgical Pty Ltd, Heidelberg Engineering

University media number:
03 8344 6937 or 0432 754 232

Understanding individual, workplace and system level influences on return to work in a changing Australian labour market (LP130100091)

This project will identify where challenges arise in return to work after a work-related injury or illness for older workers and people with mental stress claims. The results of this project will help form the basis of policy and program changes to address these issues and enable these groups of workers to have better health and economic outcomes.

$416,282
Monash University

Lead Chief Investigator:
Associate Professor Peter Smith

Partner Organisations:
WorkSafe Victoria, Australian Human Rights Commission, Safe Work Australia, Beyondblue: the national depression initiative, Ai Group

University media number:
03 9903 4840 or after hours 0448 816 046

Development of a novel vaccine targeting parasite tegument proteins for liver fluke disease in livestock (LP130100943)

Liver fluke parasites cause serious economic losses for livestock producers in South-East Australia, but drug resistance threatens parasite control and economic productivity in rural communities. This project will use novel technologies to identify lead vaccine candidates for improved fluke control to sustain agricultural productivity.

$260,943
La Trobe University

Lead Chief Investigator:
Professor Terence Spithill

Partner Organisation:
Virbac (Australia) Pty Ltd

University media number:
03 9479 5246