Program Grants for funding in 2015

The information presented on this page is provided to the research community as advice about the outcomes of the competitive peer review process for this scheme.

The eleven applications listed below have been approved for funding by the Minister for Health, the Hon Peter Dutton MP.

**Chief Investigator A: Professor John Kaldor**

**Chief Investigators:** Professor Suzanne Garland, Professor Christopher Fairley, Professor Matthew Law, Professor Andrew Grulich

**Scientific Title:** Discovery and translation of interventions to control sexually transmitted infections and their consequences

**Application ID:** APP1071269

**Administering Institution:** University of New South Wales

**Funding:** $10,353,045 over 5 years

Sexually transmitted infections are important causes of illness and death in Australia and globally. In Australia, this primarily affects young people, Aboriginal and Torres Strait Islander communities, and homosexual men. This Program has established a highly successful collaboration between two leading centres to study the biology of infection, and assess new clinical strategies for preventing and treating these infections and their consequences.

**Chief Investigator A: Professor James Paton**

**Chief Investigators:** Professor Michael Jennings, Professor Mark von Itzstein, Professor Mark Walker, Professor Bostjan Kobe

**Scientific Title:** Proteins and glycans in host-pathogen interactions: targets for novel drugs and vaccines

**Application ID:** APP1071659

**Administering Institution:** University of Adelaide

**Funding:** $8,795,785 over 5 years

Infectious diseases remain a serious threat to human health, accounting for over 10 million deaths each year. This is a broad-based collaborative Program, building on previous achievements. Its aim is to better understand the dynamic interactions between major disease-causing microbes and their human hosts, and to directly apply this new knowledge to the development of improved vaccines and novel treatment strategies, which are urgently needed to combat infectious diseases in the 21st century.
Chief Investigator A: Professor Ranjeny Thomas

Chief Investigators: Professor Geoff Hill, Professor Ian Frazer, Professor Matthew Brown, Professor Mariapia Degli-Esposti, Professor Philip Hugenholtz

Scientific Title: Immunological therapies for cancer, chronic infection and autoimmunity

Application ID: APP1071822

Administrating Institution: University of Queensland

Funding: $11,797,530 over 5 years

Some infections can start inflammation that, while controlling the infection, can also attack the body tissues of genetically susceptible people. This inflammation can initiate chronic diseases including arthritis, diabetes and cancer. This Program seeks to understand who is genetically at risk of inflammation, and thus to develop new means to prevent and treat the chronic diseases that are initiated in this way.

Chief Investigator A: Professor Angel Lopez

Chief Investigators: Professor Michael Parker, Professor Timothy Hughes

Scientific Title: Aberrant signalling in leukaemia

Application ID: APP1071897

Administrating Institution: University of South Australia

Funding: $6,669,345 over 5 years

Leukaemia is a significant global health problem. This Program studies the mechanisms that control blood cell formation and how abnormalities play a role in leukaemia. Despite some improvements, two major problems remain: controlling progression of leukaemia and relapse. The Program addresses these two major issues with the combination of studies of normal blood and leukaemia cell function, drug design and clinical trials ensuring a direct pathway from discovery to patient benefit.

Chief Investigator A: Professor Anne Kelso

Chief Investigators: Professor Stephen Turner, Professor David Jackson, Professor Lorena Brown, Professor Weisan Chen, Associate Professor Katherine Kedzierska, Professor Peter Doherty

Scientific Title: Limiting the impact of influenza

Application ID: APP1071916

Administrating Institution: University of Melbourne

Funding: $13,617,890 over 5 years

The development of better ways to prevent and treat influenza infection will be a major step forward in lessening the impact of the virus in communities worldwide. This Program involves seven research groups who will determine the ways in which the effects of influenza can be mitigated through an understanding of the factors which lead to severe disease, and how these can be lessened by novel vaccination and treatment strategies.
Chief Investigator A: Professor Richard Lewis

Chief Investigators: Professor Paul Alewood, Professor David Adams, Professor MacDonald Christie, Professor Glenn King

Scientific Title: Ion channel modulators of pain pathways

Application ID: APP1072113

Administering Institution: University of Queensland

Funding: $9,209,250 over 5 years

Many forms of pain remain poorly treated, leading to significant quality of life and economic losses. This Program will discover and characterise new peptides from cone snails and spiders that modulate specific channels in nerves that are critical to the transmission of pain signals to the brain. Using advanced chemical and structural approaches, promising leads will be optimised for potency and stability and evaluated in disease and pathway-specific models of pain to establish their clinical potential.

Chief Investigator A: Professor Richard Bryant

Chief Investigators: Professor Derrick Silove, Professor Alexander McFarlane, Professor Gin Malhi, Professor Kim Felmingham, Professor Mark Creamer

Scientific Title: Translating science into better posttraumatic mental health

Application ID: APP1073041

Administering Institution: University of New South Wales

Funding: $10,637,635 over 5 years

Trauma is responsible for a significant amount of mental health problems worldwide. Increasing disasters, violence, and war lead to much trauma in the communities. Unfortunately, most affected people do not receive much-needed care. This Program builds on discoveries from basic science to develop and evaluate clinical and population-based programs to address the range of posttraumatic mental health needs in both Australia and globally.

Chief Investigator A: Professor David Whiteman

Chief Investigators: Associate Professor Penelope Webb, Professor Adele Green

Scientific Title: Generating the evidence to control cancer and optimise outcomes

Application ID: APP1073898

Administering Institution: The Council of the Queensland Institute of Medical Research

Funding: $6,288,080 over 5 years

This Program addresses the public health aspects of common cancers, particularly cancers of the skin, ovaries and uterus. Each year in Australia, nearly 400,000 people are treated for skin cancer, and more than 3,500 women develop ovarian or uterine cancer. The aims of this Program are to understand how these cancers may be prevented, to enhance diagnosis of these cancers, and to improve the survival and quality of life for people who are diagnosed with cancer.
Chief Investigator A: Professor Andrew Sinclair  
**Chief Investigators:** Professor Peter Koopman, Professor Vincent Harley  
**Scientific Title:** Disorders of sex development: Genetics, diagnosis, informing clinical care  
**Application ID:** APP1074258  
**Administering Institution:** Murdoch Childrens Research Institute  
**Funding:** $5,509,450 over 5 years  
Disorders of sexual development (DSDs) are surprisingly common, and often result in genital abnormalities, gender mis-assignment, infertility and psychological trauma. This Program will pool expertise in human genetics, molecular and developmental biology, to find genes important for sex development, identify gene defects that cause DSD, and study their functions. The Program team will work with clinicians to apply these findings to the accurate diagnosis and medical care of DSD in children.

Chief Investigator A: Professor Graham Giles  
**Chief Investigators:** Professor Melissa Southey, Associate Professor Mark Jenkins, Professor John Hopper  
**Scientific Title:** Precision public health for major cancers – novel approaches to building the genetic, epigenetic and lifestyle knowledge base for assessing risk and prognosis  
**Application ID:** APP1074383  
**Administering Institution:** Anti Cancer Council of Victoria  
**Funding:** $8,129,930 over 5 years  
This Program of research seeks to increase our understanding of cancer risk. This Program will use large collections of population and family-based datasets to conduct innovative analyses and improve understanding of the roles that genetic, epigenetic and lifestyle factors play in determining breast, colorectal and prostate cancer risk. This information should allow better prediction of a person’s cancer risk, enabling public health interventions, such as screening, to be delivered more effectively and economically to those most at risk.

Chief Investigator A: Professor Richard Harvey  
**Chief Investigators:** Professor Bob Graham, Professor Peter Macdonald, Associate Professor Diane Fatkin, Professor Sally Dunwoodie, Professor Jamie Vandenberg  
**Scientific Title:** Molecular mechanisms and therapeutic approaches to cardiac development, regeneration and disease  
**Application ID:** APP1074386  
**Administering Institution:** Victor Chang Cardiac Research Institute Limited  
**Funding:** $10,621,535 over 5 years  
Heart disease is the leading cause of death and disability in our society. This interactive team of clinicians and basic scientists will exploit the latest advances in genome technology and stem cell biology to gain greater insights into the genetic basis of heart disease, elucidate the molecular mechanisms of cardiac function and disease and translate these insights into the development of novel therapeutic approaches for the prevention and treatment of heart disease.