

## FOUNDATION GRANTS - 2012

### **BRAIN SCIENCE RESEARCH**

#### **Professor Andrew Lawrence**

Behavioural Neuroscience Division, Flory Neuroscience Institutes at Melbourne Brain Centre,  
University of Melbourne

*"Identifying genes implicated in addiction."*

#### **Dr Laura Gray**

School of Medicine, Deakin University

*"Oxidative stress in mood disorders."*

#### **Associate Professor Andreas Hofmann**

Structural Chemistry Program, Eskitis Institute for Cell & Molecular Therapies, Griffith University

*"Molecular probing and structure-based drug design of protein targets in infection and neurological diseases."*

#### **Professor Ian Everall**

Melbourne Brain Centre, Department of Psychiatry

*"Investigation of the expression and function of selenium binding protein-1 (SELENBP1) in schizophrenia."*

#### **Professor Glenda Halliday**

Neuroscience Australia

*"Brain and DNA donation for aging and neurodegeneration research."*

#### **Dr Emily Mathey**

Neuroinflammation Laboratory, Brain and Mind Research Institute (BMRI), Central Clinical School, University of Sydney

*"Novel auto-antibodies to nervous system antigens in paralyzing disorders."*

#### **Dr Michael Weible**

The Eskitis Institute for cell and molecular therapies, National centre for adult stem cell research, Griffith University

*"Zeiss PALM Laser microdissection stage incubation for Live-Cell investigations into human neuroepithelial stem cell calcium physiology."*

#### **Associate Professor Chris Williams**

The Bionics Institute

*"Electrode development for Deep Brain Stimulation research."*

**Mr David Ziegler**

Children's Cancer Institute

*"Developing Novel therapeutic treatments for childhood brain cancers."*

**Dr Randal Moldrich**

Centre for Advanced Imaging The University of Queensland

*The role of epigenetics in epilepsy."*

**Dr Louise Cole**

Bosch Institute advanced microscopy facility

*"Upgrade of the palm duoflex combi laser microdissection and optical tweezers system to a high resolution and improved live-cell imaging platform using an Apotome.2 slider and associated software."*

**Dr Valery Combes**

Vascular Immunology Unit, Department of pathology, Sydney Medical School, The University of Sydney

*"In vivo characterisation and role of microparticles during neuroinfection."*

**Dr Marcel Batten**

Immunology Department, The Garvan Institute of Medical Research

*"Understanding the function of novel genes associated with development of Multiple Sclerosis."*

**Dr Graeme Polglase**

The Ritchie Centre, Monash Institute of Medical Research, Monash University

*"Protecting the brain from external factors at preterm birth."*

**Dr Michael Lovelace**

Discipline of Anatomy and Histology, Bosch Institute, The University of Sydney

*"An Investigation of purinergic nucleotides in directing the differentiation of human neural precursor cell populations: application to cell therapy for Parkinson's disease."*

**Stanley Stylli**

Department of Neurosurgery, The Royal Melbourne Hospital

*"Treatment of brain tumors utilising the 'nanosponge delivery system' (NDS)."*

**Professor Cheryl Jones**

The University of Sydney, The Children's Hospital at Westmead Clinical School

*"What is the profile and burden of cerebral palsy (CP) due to congenital cytomegalovirus (CMV) infection in Australia - population based molecular testing for CMV on stored newborn screening cards from children on Australian National CP register."*

## **DIABETES RESEARCH**

### **Associate Professor Susan McLennan**

University of Sydney, Discipline of Medicine

*"The Study of diabetes and its complications."*

### **Professor Greg Barritt**

Medical Biochemistry, School of Medicine, Faculty of Health Sciences, Flinders University

*"Mechanism of impaired signaling in the liver in insulin resistance."*

### **Dr Maria Craig**

School of Women's and Children's Health, University of New South Wales, Institute of Endocrinology and Diabetes, Children's Hospital at Westmead, and Virology Research Laboratory, Prince of Wales Hospital, Randwick

*"Assessing human enteroviruses as a cause of type 1 diabetes mellitus - virulence determinants and  $\beta$ -cell tropism."*

### **Associate Professor Alicia Jenkins**

The University of Melbourne, Department of Medicine, St Vincent's Hospital

*"Retinal vascular health in diabetes as a measure of systemic blood vessel health, Advanced Glycation End Product burden, and diabetes complication risk."*

### **Professor Michael Horowitz**

University of Adelaide, Discipline of Medicine, Royal Adelaide Hospital

*"Measurement of blood glucose in patients with diabetes and critical illness induced hyperglycaemia."*

### **Professor David James**

Diabetes and Obesity Research Program, The Garvan Institute of Medical Research

*"A proteomics and systems biology approach to investigate insulin signaling and type 2 diabetes."*

### **Dr Ann Simpson**

School of Medical & Molecular Biosciences, University of Technology, Sydney

*"Low temperature storage facility for production of insulin-secreting liver cells."*

## **GENETIC RESEARCH**

### **Dr Chuck Bailey**

Gene & Stem Cell Therapy Program, Centenary Institute

*"Determining the genetics of response to treatment in Chronic Myeloid Leukaemia (CML)."*

### **Dr Ruth MacKinnon**

Victorian Cancer Cytogenetics Service (VCCS), St Vincent's Hospital (Melbourne) Ltd

*"Using multicoloured chromosomes as a tool to help understand chromosome mis-division."*

### **Dr Kelly Rogers**

Centre for Dynamic Imaging, Walter & Eliza Hall Institute of Medical Research

*"High performance LEDs for live-cell imaging."*

### **Associate Professor Kathryn North**

The Institute of Neuroscience and Muscle Research (INMR), The Children's Hospital at Westmead

*"Improving the genetic diagnosis of neuromuscular diseases."*

### **Dr Viive Howell**

Cancer NSW Institute Research Fellow, Functional Genomics Laboratory, Kolling Institute of Medical Research, Royal North Shore Hospital

*"Scanning for mutations in cancer susceptibility genes."*

## **GERIATRIC RESEARCH**

### **Dr Anne Poljak**

Bioanalytical Mass Spectrometry Facility, University of New South Wales

*"Protein profiling of plasma in normal aging and early dementia."*

### **Professor Derek Hart**

Dendritic Cell Biology and Therapeutics Laboratory, ANZAC Research Institute, Concord Hospital

*"RNA loading of tumour associated antigens and the activation of blood dendritic cells for prostate cancer immunotherapy."*

### **Associate Professor Hala Zreiqat**

Biomaterials and Tissue Engineering Research Unit, School of Aerospace, Mechanical and Mechatronic Engineering, University of Sydney

*"A basis for building bone: Novel biomaterials for new bone growth."*

## **LUNG RESEARCH**

### **Professor Anthony Weiss**

Molecular Bioscience, The University of Sydney

*"Novel treatment of damaged airway."*

### **Dr Alexander Larcombe**

Division of Clinical Sciences, Telethon Institute for Child Health Research

*"Rhinovirus impairs physiological and immunological lung development and causes exacerbation of allergic airways disease."*

### **Dr Daniel Chambers**

Department of Thoracic Medicine, The Prince Charles Hospital

*"The Human Lung Microbiome Project."*

### **Dr Gabrielle Belz**

Division of molecular immunology, Walter and Eliza Hall Institute of Medical Research

*"Cellular and transcriptional mechanisms regulating immune responses in the lung microenvironment."*

### **Professor Warwick Britton**

Myobacterial Research Program, Centenary Institute of Cancer Medicine and Cell Biology

*"Function and diagnostic potential of Microparticles induced by Mycobacterium tuberculosis infection in the lung."*

## **RHEUMATOLOGY RESEARCH**

### **Professor Ian Wicks**

Inflammation division, Walter & Eliza Hall Institute of Medical Research

*"Applying serum proteomics to the study of rheumatoid arthritis."*

### **Dr Thomas Gethin**

University of Queensland Diamantina Institute, Princess Alexandra Hospital

*"Assessment of novel treatments in ankylosing spondylitis."*

### **Professor John Hamilton**

Department of Medicine, Royal Melbourne Hospital

*"Granocyte macrophage colony-stimulating factor (GM-CSF) 'gene signature' in patients with rheumatoid arthritis (RA)."*

## **VISION SCIENCE RESEARCH**

### **Dr Jelena Kezic**

Department of Anatomy and Developmental Biology (School of Biomedical Sciences), Monash University

*“The role of retinal microglia in a mouse model of spontaneous early onset of hyperglycaemia.”*

### **Professor Tailoi Chan-Ling**

Retinal and developmental neurobiology laboratory, Bosch Institute, Discipline of Anatomy and Histology, Sydney Medical School, The University of Sydney

*“Development and ageing of the human choroidal vasculature: Role of stem cells, lymphangiogenesis and novel pro- and anti-angiogenic growth factors as targets in treating Wet Age Related Macular Degeneration (MD).”*

### **Professor Minas Coroneo**

Department of Ophthalmology, The Prince of Wales Hospital, Randwick. Also under the supervision of UNSW

*“Novel techniques for the creation of conjunctival grafts.”*