

## FOUNDATION GRANTS – 2017

### **BRAIN SCIENCES RESEARCH: PSYCHIATRY AND NEUROLOGY**

**Dr Guy Barry**

QIMR Berghofer Medical Research Institute  
*Brain Diabetes*

**Prof Michael Breakspear**

QIMR Berghofer Medical Research Institute  
*Improving the Utility of Submaximal Fitness in Patients with Severe Mental Illness*

**Dr Rose Chesworth**

Western Sydney University  
*Understanding Cannabinoid Abuse in Schizophrenia*

**Dr Hayley Dickinson**

Hudson Institute of Medical Research  
*Creatine Content of Pre-Term Human Milk and Formula: Implications for Neurological Development in this High-Risk Population*

**Dr Thomas Duncan**

Brain and Mind Centre, University of Sydney  
*Skin to Neuron: A Novel Therapy for Alzheimer's Dementia*

**Dr Mark Graham**

Children's Medical Research Institute  
*A Laser Puller for the Analysis of Neuronal Signalling Mechanisms*

**Assoc. Prof Helmut Hügel**

Royal Melbourne Institute of Technology  
*A Natural Product Spirooxindole Scaffold for the Design and Development of Novel Anti-neurodegenerative Agents for the Treatment of Alzheimer's disease?*

**Dr Lauriane Jugé**

Neuroscience Research Institute  
*Development of an Imaging Biomarker to Differentiate Early Causes of Dementia*

**Dr James Kesby**

Queensland Brain Institute  
*Understanding Early Dopamine Function in Schizophrenia*

**Prof Simon Koblar**

University of Adelaide  
*Npas4, a Promising Target to Repair Brain Injury After Stroke*

**Prof John McGrath**

Queensland Brain Institute, Queensland Centre for Mental Health Research  
*Voltage-Gated Calcium Channels and Vitamin D: Investigating the Convergent Links Between Risk Factors for Schizophrenia*

**Dr Kimberley Pitman**

Menzies Institute for Medical Research, UTAS  
*Building a New Electrophysiology Rig*

**Prof William Rawlinson**

University of New South Wales  
*Therapeutic Models for the Prevention of Virus-Induced Congenital Neurological Malformation*

**Prof Des Richardson**

The University of Sydney  
*Development of Innovative Multi-Functional Drugs for the Treatment of the Multiple Pathologies in Alzheimer's Disease*

**Assoc. Prof Justin Rubio**

University of Melbourne  
*Is There a Role for Oligodendrocyte Somatic Mutation in Progressive MS?*

**Dr Lianne Schmaal**

Orygen, The National Centre of Excellence in Youth Mental Health  
*Elucidating Individual Differences in the Presentation of Youth Depression by Meaningfully Integrating Biological, Clinical and Behavioural Data.*

**Dr Phillippa Taberlay**

University of Tasmania  
*New geNOMeC Maps of Neuronal Epigenetic Changes in Alzheimer's Disease*

**ENDOCRINOLOGY AND DIABETES**

**Dr Michael Bertoldo**

University of New South Wales  
*Metformin - Effects on Oocyte Quality and Function*

**Prof Maria Craig**

University of New South Wales, Prince of Wales Hospital  
*Characterising the Population of Viruses that Trigger Islet Autoimmunity and Type 1 Diabetes Using Virome Capture Sequencing*

**Prof Michael Horowitz**

University of Adelaide  
*Measurement of Gut-Related Hormones Involved in Regulating Gastric Emptying, Intestinal Transit, Blood Glucose Concentrations, and Appetite*

**A/Prof Meg Jardine**

The George Institute for Global Health  
*Diabetic Management: Do Older Australians Require Specific Targets?*

**A/Prof Slade Jensen**  
Ingham Institute of Applied Medical Research  
*Massively Parallel DNA Sequencing and Transcriptomics of Diabetic Foot Infections*

**Dr William Korim**  
Florey Institute of Neuroscience and Mental Health  
*Neurogenesis and Vagus Nerve Activity: A Novel Early Prognosticator of Diabetes Onset.*

**Prof Itamar Levinger**  
Victoria University  
*The Role of Osteocalcin in Blood Vessel Disease: A Novel Approach to Fight Blood Vessels Disease*

**Prof Richard Maclsaac**  
St Vincent's Hospital Melbourne  
*Investigating a Novel Risk Marker to Identify Progressive Diabetic Kidney Disease in Indigenous Australians*

**Dr Sonia Saad**  
Kolling Institute of Medical Research  
*Novel Treatment for Kidney Disease Related to Dietary Obesity and Maternal Obesity*

**A/Prof Simone Schoenwaelder**  
Heart Research Institute  
*A Novel Therapeutic Target for Diabetic-Associated Thrombosis - The Role of PI 3-kinase p110beta*

**Prof Ann Simpson**  
University of Technology Sydney  
*Analysis of Insulin-Secreting Human Liver Cells*

**A/Prof Michael Skilton**  
University of Sydney  
*Assessing Autonomic Activity in Children: Preventing Cardio-Metabolic Disease*

**Prof Peter Thorn**  
University of Sydney  
*Is Insulin Secretion Regulated by a Synaptic-Like Mechanism?*

**A/Prof Anthony Verberne**  
University of Melbourne  
*Orexin Regulation of Pancreatic Glucagon Secretion: New Hope for Management of Iatrogenic Hypoglycaemia*

**Dr Neil Youngson**  
University of New South Wales  
*Do Exercise and NAD<sup>+</sup>-Raising Drugs Synergise in Treatment of Type 2 Diabetes?*

## **GERIATRICS**

### **Dr Timothy Sargeant**

SAHMRI

*Deciphering Genetic Data in Alzheimer's Disease: Assigning Function to Risk Factor Genes*

### **Dr Shayanti Mukherjee**

Hudson Institute of Medical Research

*Let's Mesh it Better: Advanced Gynaecological Care for Elderly Women With Pelvic Organ Prolapse (POP)*

### **Dr Liang Zhao**

University of Technology, Sydney

*Reconstruction and Navigation for Endovascular Catheter Procedures by Intravascular Ultrasound and Electromagnetic Sensing*

## **LUNG DISEASE (OTHER THAN CANCER)**

### **Prof Alaina Ammit**

UTS and the Woolcock Institute of Medical Research

*Switching Tristetraprolin on to Turn Off Inflammation in Lung Disease*

### **Prof Nigel Curtis**

Murdoch Childrens Research Institute

*Monitoring TB Treatment Success: Validation of Novel Biomarkers*

### **Prof Christine Jenkins**

The George Institute for Global Health

*Preventing Adverse Cardiac Events in Chronic Obstructive Pulmonary Disease (COPD)*

### **Dr Richard Kim**

The University of Newcastle

*Investigation of the Role of Slc26a4 in the Induction of Respiratory Acidosis and Severe, Steroid-Resistant Asthma*

### **Dr Despoina Koulenti**

The University of Queensland

*International Multicentre Prospective Observational Cohort Study of Nosocomial Pneumonia in Intensive Care Units*

### **A/Prof Peter Vuillermin**

Deakin University

*Microbial Exposure, Innate Immune Development and Asthma*

### **A/Prof Cynthia Whitchurch**

The ithree institute, The University of Technology Sydney.

*Discovery of Novel Antibiotics for the Treatment of Bacterial Lung Infections*

## **RHEUMATOLOGY**

### **Prof Gerald Atkins**

University of Adelaide

*The Responses of Osteocytes to Hypoxia*

### **A/Prof Justine Ellis**

Murdoch Childrens Research Institute

*Why Do Boys Get Juvenile Arthritis Less Often than Girls?*

### **Dr Sarah Jones**

Monash University

*Immunospheres: Creating an Immune System in a Microparticle*

### **Dr Laurence Macia**

The Charles Perkins Centre, The University of Sydney

*Manipulate Immune Tolerance to Improve Rheumatoid Arthritis*

## **VISIONS SCIENCES**

### **Prof Jamie Craig**

Flinders Ophthalmology

*Human Ocular Tissue Expression Atlas*

### **Prof Jennifer Gamble**

Centenary Institute

*A New Therapy for Eye Disease*

### **Dr Roy Kong**

University of Melbourne, St Vincent's Hospital

*Is GPR109A a Potential Therapeutic Target to Alleviate Inflammation in the Retina?*

### **Dr Guei-Sheung Liu**

Centre for Eye Research Australia

*A Switchable Gene Therapy for Retinal Vascular Leakage in Diabetic Retinopathy*

### **Prof Paul McMenamin**

Monash University

*Imaging Toxoplasmosis in the Eye Using Genetically Modified Parasites and Host Mice*

### **Prof Justine Smith**

Flinders University

*Zika Virus Infection of the Human Eye*

### **Dr Kirstan Vessey**

The University of Melbourne

*A Novel Mechanism and Treatment Strategy for Age-Related Macular Degeneration*