

### 2021 Grant Round Outcomes

#### ADS-Diabetes Australia Research Program Award

Researcher	Institute	Project Title	State
Dr Abdul Waheed Khan	Monash University	Role of EZH2 in atherosusceptible vascular endothelium in diabetes associated atherosclerosis	VIC

#### Kellion Diabetes Foundation Research Grant

Researcher	Institute	Project Title	State
Associate Professor Isabelle Jalbert	University of New South Wales	IDEA: Co-designing and feasibility testing of an evidence-based and theory-informed intervention to Improve appropriateness of Diabetic Eyecare in Australia	NSW

#### General Grants

Researcher	Institute	Project Title	State
Associate Professor Ross Laybutt	Garvan Institute of Medical Research	XBP1 maintains $\beta$ -cell identity by repressing an $\alpha$ -cell program	NSW
Dr Nicola Lee	Garvan Institute of Medical Research	Central leptin signalling through NPY neurons regulates glucose homeostasis	NSW
Associate Professor Carsten Schmitz-Peiffer	Garvan Institute of Medical Research	Proof-of-Principle: Inhibitors of Protein Kinase C Epsilon as Dual Action Agents for the Treatment of Type 2 Diabetes	NSW
Dr Lei Zhang	Garvan Institute of Medical Research	Brainstem circuitries as intervention points for type 2 diabetes treatment	NSW
Dr Chunling Huang	Kolling Institute of Medical Research	Targeting Kv1.3 as a novel therapeutic strategy for diabetic kidney disease	NSW
Dr Sue Mei Lau	Prince of Wales Hospital	Development of an evidence-based model of cost-effective diabetes inpatient care using a diabetes patient finding tool (the Diabetes Dashboard).	NSW
Professor Kim Donaghue	The Children's Hospital at Westmead	The CANDID Study: Improving Outcomes of Childhood Type 1 Diabetes	NSW
Professor Nick Di Girolamo	University of New South Wales	A novel treatment for type 1 diabetes that regenerates sensory nerves: using the eye as a model	NSW
Dr Ki Wook Kim	University of New South Wales	Characterising the population of respiratory viruses that promote the development of islet autoimmunity and type 1 diabetes using virome capture sequencing	NSW
Professor Nigel Turner	University of New South Wales	Pharmacological targeting of the sphingolipid metabolism to treat metabolic disease	NSW
Dr Kedar Ghimire	University of Sydney	A novel strategy to promote insulin secretion and improve treatment for diabetes mellitus	NSW
Professor David James	University of Sydney	Molecular Dissection of a Human Lipodystrophy Mutation	NSW
Dr Praveesuda Michael	University of Sydney	3D Perfusion Bioreactor: A novel approach to study synthetic vascular graft endothelialisation in diabetes	NSW
Dr Reena Singh	University of Sydney	To identify the effect of basement membrane proteins on the global gene expression pattern of human stem cell derived-beta (SC- $\beta$ ) cells and dissect the underlying mechanism of enhanced function	NSW
Professor Wah Cheung	Westmead Hospital	The Role of Metabolic Dysfunction-Associated Fatty Liver Disease in the Development of Hyperglycaemia in Pregnancy	NSW

## General Grants

Researcher	Institute	Project Title	State
Dr Curtis Roman	NT Department of Local Government, Housing and Community Development	In Our Own Words. Aboriginal Diabetes Information in Aboriginal Languages	NT
Associate Professor Toby Pavey	Queensland University of Technology	Using rugby league clubs to reduce diabetes risk in overweight and obese men: League Fans in Training (League-FIT)	QLD
Dr Helen Barrett	University of Queensland	Assessing hyperglycaemia in women pregnant after bariatric surgery	QLD
Dr Timothy Sargeant	SAHMRI	Characterising autophagic flux in response to dietary intervention: increasing cellular health in people at risk of diabetes	SA
Professor Simon Barry	University of Adelaide	Connecting the genetic risk of T1D to the genes that are altered by it in immune cells	SA
Professor Christine Feinle-Bisset	University of Adelaide	Effects of the bitter tastant, quinine, on postprandial glycaemia and energy intake in type 2 diabetes - implications for novel strategies for management	SA
Professor Michael Horowitz	University of Adelaide	Management of critical illness-induced ('stress') hyperglycaemia with native glucagon-like peptide-1 (GLP-1)	SA
Dr Imre Kouw	University of Adelaide	The effect of enteral feeding pattern on glycaemic control and gastrointestinal function in critically ill patients	SA
Dr Joanne Tan	University of Adelaide	Targeted Delivery of anti-miR-181c by Hypoxia-Responsive Copolymer Nanoparticles to Reverse Diabetes-Impaired Angiogenesis	SA
Dr Tongzhi Wu	University of Adelaide	More or less? Bile acids and glycaemic control in type 2 diabetes	SA
Associate Professor Richard Young	University of Adelaide	Blocking intestinal sweet taste for glycaemic benefits in type 2 diabetes	SA
Professor Andrew Zannettino	University of Adelaide	Development of a bone-targeting mTORC1 inhibitor as a novel glucose lowering medication for the treatment of diet-induced hyperglycaemia	SA
Dr Man Lee	Baker Heart and Diabetes Institute	Inducing apoptosis in platelets reduces atherosclerosis in mice with diabetes	VIC
Dr Christel Hendrieckx	Deakin University	Determining the next decade of difference in diabetes: psychosocial and behavioural research priority setting for and by those affected by diabetes	VIC
Associate Professor Michelle Keske	Deakin University	Oral glucose tolerance test causes acute skeletal muscle microvascular insulin resistance in healthy people: determining the gut-derived factors that underpin microvascular impairments	VIC
Dr Chris Shaw	Deakin University	Fasting hyperinsulinemia remodels adipose tissue metabolism to drive obesity and insulin resistance	VIC
Dr Maria Jelinic	La Trobe University	To 'B' or not to 'B'? Sex differences and the role of B cells in obesity-related kidney disease	VIC
Dr Frank Ma	Monash University	Overcoming Vulnerability and Improving Outcomes of Acute Kidney Injury in Diabetic Patients	VIC
Dr Darnel Prakoso	Monash University	Elucidating the transcriptomic profile of impaired glucose metabolism in diabetic female hearts	VIC
Professor Sharon Ricardo	Monash University	Using an injectable hydrogel for the sustained therapeutic release of bioinspired cell-free secretome to alleviate diabetic kidney damage	VIC

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Researcher	Institute	Project Title	State
Professor Rebecca Ritchie	Monash University	Understanding the sex-specific benefits of glucose-lowering therapies in the diabetic heart	VIC
Dr Adam Rose	Monash University	Towards precision amino acid restriction as a therapy for type 2 diabetes	VIC
Dr Matthew Snelson	Monash University	Using dietary therapy to slow the progression of diabetic kidney disease	VIC
Associate Professor Greg Tesch	Monash University	Use of an early urine biomarker to identify individuals who can best benefit from ASK1 inhibitor therapy during diabetes	VIC
Associate Professor Geraldine Mitchell	St Vincent's Institute of Medical Research	Bio-engineering a vascular platform for surgical reconstruction of diabetic wounds	VIC
Associate Professor Tim Hewitson	The Royal Melbourne Hospital	Metabolic Priming and Reprogramming of the Glomerulus in Diabetic Kidney Disease	Vic
Dr John Karas	University of Melbourne	Low Cost Insulin Therapeutics	VIC
Dr Stacey Keenan	University of Melbourne	Cutting the fat: targeting HSD17 $\beta$ 11 to regulate lipid metabolism and glycemic control	VIC
Dr Magdalene Montgomery	University of Melbourne	Hexosaminidase A (HEXA) – a new therapeutic target for glycaemic control	VIC
Dr Sarah Price	University of Melbourne	Using continuous glucose monitoring (CGM) to explore glucose as a mediator of adverse pregnancy outcomes in women with obesity	VIC
Dr Nicola Gray	Murdoch University	Metabolic phenotyping in diabetic retinopathy – towards predicting and understanding disease progression	WA
Dr Keely Bebbington	University of Western Australia	Promoting Resilience in Stress Management (PRISM-P) for parents of young children with Type 1 Diabetes: A pilot randomised controlled trial	WA
Dr Kimberley Seear	University of Western Australia	Progression to diabetes among Aboriginal people in the Kimberley: Identifying opportunities to enhance intervention for prevention within primary health care	WA
Dr Craig Taplin	University of Western Australia	Validation of Physical Activity Assessment in Type 1 Diabetes – an Essential Step to Incorporating Systematic Measurement of Activity as the Standard of Care in Youth	WA