

## Diabetes Australia Research Trust 2008 Grants

Chief Investigator	Institution	Short Title	Simple Description
Dr Jerry Greenfield	Garvan Institute of Medical Research	Does glutamine supplementation have a beneficial effect on GLP-1 and insulin secretion in patients with type 2 diabetes?	Type 2
Dr Hui Chen	University of New South Wales	Impact of maternal smoking and obesity on pathways involved in central and peripheral glucose metabolism.	Type 2
Dr Edna Hardeman	Children's Medical Research Institute	A novel cytoskeletal domain that regulates insulin tolerance and glucose uptake in muscle.	Type 2
Dr Paul Witting	Anzac Research Institute	Synthetic polyphenol antioxidants that reverse diabetes induced vascular dysfunction.	Type 2 and Complications
Dr Velandai Srikanth	Monash University	Dr How does type 2 diabetes contribute to the risk of demetia? – a pilot twin study	Type 2 and Complications
Dr Sarah Garnett	The Children's Hospital at Westmead	Dietary Protein: the effects of insulin resistance in adolescents	Other
Dr Aisling McMahon	Anzac Research Institute	Evaluation of a novel antioxidant treatment to reduce heart attack severity in diabetes.	Type 2 and Complications
Dr Nigel Turner	Garvan Institute of Medical Research	A role for nuclear hormone receptor Nur77 in regulating skeletal muscle fatty acid oxidation.	Type 2
A/Prof. Harry Lowe	Anzac Research Institute	An examination of mechanisms of poor outcomes following heart attack in diabetes.	Type 2 and Complications

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Prof. Ann Simpson	University of Technology Sydney	Reversal of diabetes in pigs using liver-directed gene therapy.	Type 1
Prof. Maree Smith	University of Queensland	Novel therapeutic for treating painful diabetic neuropathy (PDN).	Complications
Dr Carsten Schmitz-Peiffer	Garvan Institute of Medical Research	The role of phosphatidic acid in lipid induced insulin resistance.	Type 2
A/Prof. Philip Clarke	University of Sydney	Development and validation of risk tables for quantifying life expectancy in people with type 2 diabetes.	Type 2
Dr Susan McLennan	University of Sydney	Extracellular matrix metalloproteinase inducer (EMMPRIN): Its role in poor wound healing in diabetes.	Complications
Dr Leonie Heilbronn	Garvan Institute of Medical Research	Adipose tissue macrophages and insulin resistance in humans.	Type 2
Dr Clair Sullivan	University of Queensland	Prevention of cardiovascular disease: Understanding the links between diabetes, obesity and platelet function.	Type 2
Dr Janelle Barry	University of Queensland	The role of FOXO Transcription Factors in Glucocorticoid-induced Insulin Resistance	Type 2
Prof. David McIntyre	Mater Health Services	The feasibility and efficacy of an individualised approach to increase physical activity among women with previous gestational diabetes mellitus.	Type 2
A/Prof. Brendan Murphy	Monash University	Incidence and prevalence of glucose intolerance, insulin resistance, diabetes mellitus and metabolic syndrome in young adults with psychosis.	Type 2

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Dr Sally Martin	University of Queensland	Identification of novel natural products affecting lipid storage.	Other
Dr Jon Whitehead	University of Queensland	Investigation of the functional role of novel adiponectin interacting proteins.	Type 2
Dr Jennifer Moffitt	University of Queensland	Characterising the IMPDH type 2 AMKO mouse in a model of diet induced obesity: potential validation of a novel therapeutic target.	Type 2
Dr Richard Young	Adelaide University	Characterisation of intestinal sweet taste molecules in type 2 diabetes.	Type 2
Dr Kathryn Gatford	University of Adelaide	Can exendin-4 prevent impaired insulin secretion following poor growth before birth?	Type 2
Dr Damien Keating	University of South Australia	Role of RCAN1 in the regulation of pancreatic function, insulin secretion and type 1 diabetes.	Type 2
Prof. Peter Clifton	Flinders Medical Centre	Treatment of the obese person with established type 2 diabetes: laparoscopic adjustable gastric banding vs medical management?	Type 2
Prof. Jennifer Couper	Women and Children's Hospital, Adelaide	Is glucose variability an independent risk factor for vascular dysfunction in children with type 1 diabetes?	Type 1
A/Prof. Tony Tiganis	Monash University	Regulation of insulin signalling and glucose homeostasis by Nox4.	Type 2
Dr Tim Hewitson	Royal Melbourne Hospital	Relaxin and the pathophysiology of diabetic nephropathy and cardiomyopathy.	Complications

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Dr Dianna Magliano	International Diabetes Institute	Linkage of the National Diabetes Services Scheme database to the National Death Index.	Type 2
Prof. John Hawley	RMIT	Can exercise training reverse the risk factor profile in rats genetically predisposed to metabolic syndrome?	Type 2
A/Prof. Bronwyn Kingwell	Baker Heart Research Institute	The hydroxylamine derivative BGP-15 as a novel hypoglycaemic agent in patients with type 2 diabetes.	Type 2
Dr Anna Calkin	Baker Heart Research Institute	Diabetes Associated Atherothrombosis: Role of advance Glycation	Complications
Dr Matthew Watt	St Vincent's Institute of Medical Research	Does pigment epithelium-derived factor contribute to the pathogenesis of obesity induced insulin resistance?	Type 2
A/Prof. Mary Wlodek	University of Melbourne	Are postnatal nutrition and the intrauterine environment important for early skeletal muscle development function?	Type 2
Prof. Boyd Swinburn	Deakin University	Obesity prevention impact of removing caffeine from soft drinks.	Other
A/Prof. Jie Jin Wang	University of Melbourne	Retinal vascular calibre and endothelial dysfunction in type 2 diabetes.	Type 2 and Complications
Dr Amanda Edgley	University of Melbourne	CCL2 DNA vaccination to prevent diabetic cardiac fibrosis.	Complications

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Dr Marisa Gallicchio	Monash University	Effects of advanced glycated end products on renal proximal tubule cell function.	Complications
Dr Rebecca Ritchie	Baker Heart Research Institute	Cardiac specific IGF <sub>1</sub> receptor overexpression rescues diabetic cardiomyopathy.	Complications
Dr Gregory Steinberg	St Vincent's Institute of Medical Research	A novel pathway regulating fatty acid metabolism: Implications for the treatment of the metabolic syndrome.	Type 2 and Complications
Dr Clinton Bruce	Baker Heart Research Institute	Lipidomics and lipid profiling: identifying novel lipid species involved in the development of skeletal muscle insulin resistance.	Type 2
Dr Grant Drummond	Monash University	Targeting heme-oxidised/heme-free soluble guanylyl cyclase to identify diabetic patients at risk of development of cardiovascular disease.	Type 2 and Complications
A/Prof. Assam El-Osta	Baker Heart Research Institute	Persistent changes in vascular gene activity stimulated by hyperglycaemia.	Complications
Prof. George Jelinek	St Vincent's Hospital	The feasibility of emergency department based screening for type 2 diabetes and pre-diabetes: What are the prevalence rates and best methods of detection?	Type 2
Dr Narin Osman	Baker Heart Research Institute	PPAR $\gamma$ and PPAR $\gamma$ ligands (glitazones) in the aetiology and prevention of calcific aortic disease in diabetes.	Complications
Dr Dmitri Sviridov	Baker Heart Research Institute	The effect of obesity and weight loss in metabolic syndrome patients on HDL functionality.	Type 2

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A/Prof. Peter Little	Baker Heart Research Institute	Anti-inflammatory actions of PPAR ligands mediated via inhibition of hyaluronan biosynthesis in vascular smooth muscle cells.	Complications
A/Prof. Karin Jandeleit-Dahm	Baker Heart Research Institute	Does deletion of the receptor for advanced glycation end products (RAGE) protect from development and progression of diabetic nephropathy?	Complications
Dr Graeme Lancaster	Baker Heart Research Institute	The role of macrophage lipid accumulation in obesity-induced inflammation and insulin resistance.	Type 2
Dr Vance Matthews	Baker Heart Research Institute	The potential of brain derived neurotrophic factor as a therapy to treat obesity induced insulin resistance.	Type 2
Dr Sakenah Zraika	University of Melbourne	Investigation of the role of neprilysin in insulin secretion and pancreatic beta cell dysfunction.	Type 2
Prof. Leon Bach	Monash University	Defining the ezrin binding site for glycated proteins and development of peptide antagonists for use in studying diabetic complications.	Complications
Dr Erica Fletcher	University of Melbourne	Early vascular changes in diabetes are caused by glial cell dysfunction.	Complications
Dr Weier Qi	St Vincent's Hospital	Inhibition of PKC-beta attenuates thioredoxin-interacting protein via kruppel-like factors dependent pathways in diabetic nephropathy.	Complications
Ms Lisa Moran	Monash University	Assessment of diabetes and cardiovascular disease risk in different presentations of polycystic ovary syndrome.	Type 2, complications and other

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Dr Leonel Gonez	Bernard O'Brien Institute of Microsurgery	Characterisation of putative stem cells isolated from adult mouse and human pancreas: a cellular source to generate insulin-producing cells for diabetes therapy.	Type 1
Dr Thomas Loudovaris	St Vincent's Institute of Medical Research	Cell therapy for type 1 diabetes.	Type 1
Prof. Christina Mitchell	Monash University	Regulation of GLUT4 plasma membrane translocation by P-REX-1.	Type 2
Dr Spiros Furlanos	Walter & Eliza Hall Institute of Medical Research	Investigating the effect of vitamin D therapy on beta-cell function in autoimmune diabetes in adults.	Type 1
Dr David Segal	Deakin University	Chemerin is a novel adipokine associated with the metabolic syndrome.	Type 2
Dr Nora Straznicky	Baker Heart Research Institute	Interrelationship between sympathetic nervous system activity and renal function in the metabolic syndrome: benefits of weight loss and aerobic exercise.	Other
Dr Marianne Tare	Monash University	Mechanisms leading to regional differences in vasodilator dysfunction in resistance arteries in diabetes.	Type 1
Dr Diane Webster	MacFarlane Burnet Institute for Medical Research	The production and optimisation of sRAGE as a biotherapeutic.	Complications
Dr Chris Wright	Monash University	Peri-operative management of hyperglycaemia: Improving outcomes for patients with hyperglycaemia undergoing cardiac and vascular surgery.	Type 1, type 2 and complications

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Prof. Timothy Davis	University of Western Australia	Predictors and outcomes of hepatobiliary disease in type 2 diabetes: The Fremantle Diabetes Study	Type 2 and Complications
Prof. Grant Morahan	WAIMR	Development of insulin-expressing cells from stem cells.	Other
Dr Mario J Soares	Curtin University of Technology	Addressing energy balance, insulin sensitivity and cardiovascular risk in abdominal obesity: is there a benefit of low-fat dairy intake?	Other
Prof. Peter Leedman	University of Western Australia	Functional role of SLIRP, a novel coregulator, in metabolism.	Other