

## **All EYES ON DIABETES: Diabetes Victoria funds vital diabetes research**

**Monday 7 November 2016:** As the leading charity working to reduce the impact of diabetes in the Victorian community, Diabetes Victoria continues its commitment to support promising diabetes research projects. For 2017, Diabetes Victoria has contributed \$1.3 million to the \$3.6 million Diabetes Australian Research Program (DARP) funding pool, directly supporting 17 Victorian researchers looking into better treatment and management options for all types of diabetes, as well as reducing the risk of well-documented serious health complications.

"Research has come a long way in helping us to understand all types of diabetes," says Diabetes Victoria CEO Craig Bennett. "Although the scientific puzzle is not yet solved, countless projects have led to significant improvements in diabetes management and the related technology. There is a great and ongoing need for timely and important research in Australia, so we must continue our efforts in this area."

Since 1987, DARP has supported and developed outstanding diabetes research in Australia. DARP provides funding for a range of grants across the full spectrum of diabetes research through a merit-based, competitive, peer review process. Funded projects can focus on prevention, management of diabetes or the cure for diabetes.

Every year, Diabetes Victoria passes on significant proceeds from its various fundraising activities to the national DARP funding pool. In 2017, a total of 55 DARP grants were offered, 17 to Victorian-based researchers. Diabetes Victoria has contributed \$1.3 million to the DARP funding pool.

"Every dollar donated ensures more vital research is undertaken. Each project may hold a vital key to that next development, helping to make a real difference," Craig says. "I'm pleased to congratulate our 17 Victorian recipients, who are advocates of Victoria's brilliant reputation for world class medical research."

An announcement will be made in due course about the Victorian recipients of the *DARP Millennium Awards* (type 1 and type 2), each valued at \$150,000.

*We **support, empower and campaign for** all Victorians affected by diabetes.*

### **For more information:**

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**2017 DARP General Grants for Victoria**

Researcher	Project Title	Description
<b>Dr Bianca Bernardo</b> Baker IDI Heart and Diabetes Institute	<i>Evaluating off-label use of tilorone as a novel therapeutic for the diabetic heart</i>	Dr Bianca Bernardo will examine the therapeutic potential of Tilorone, a drug that has FDA approval to treat various viral diseases. Dr Bernardo will test this therapy in a mouse model of type 1 diabetes to reduce tissue scarring and develop a novel therapy for the diabetic heart.
<b>Dr Anna Calkin</b> Baker IDI Heart and Diabetes Institute	<i>The role of cholesterol in hepatic glucose metabolism</i>	Dr Anna Calkin will explore how to stop the onset of type 2 diabetes. She is particularly interested how cholesterol deposits in the liver lead to the development of insulin resistance and pre-diabetes. Her aim is to regulate this metabolic process and to ultimately reduce the incidence of type 2 diabetes.
<b>Professor Mark Cooper</b> Baker IDI Heart and Diabetes Institute	<i>Role of Set7 in metabolic memory: implications for diabetic nephropathy</i>	Professor Mark Cooper's project investigates a particular enzyme called Set7 and what role it plays in a phenomenon known as 'metabolic memory'. This research could stop kidney disease caused by high glucose levels.
<b>Associate Professor Rebecca Ritchie</b> Baker IDI Heart and Diabetes Institute	<i>Nitroxyl donors: novel pharmacotherapy for management of heart failure induced by type 2 diabetes</i>	Associate Professor Rebecca Ritchie will continue her work on a naturally-occurring molecule called nitroxyl (HNO) which has an exciting potential to treat chronic heart failure and diabetic heart disease.
<b>Dr Mitchel Tate</b> Baker IDI Heart and Diabetes Institute	<i>Combination pharmacological and gene therapeutic approaches to treat type 2 diabetes-induced cardiomyopathy</i>	Dr Mitchel Tate will combine current pharmacological and gene therapeutic approaches to delay a decline in heart pumping function which is widespread in diabetes-related heart disease.
<b>Dr Eser Zerenturk</b> Baker IDI Heart and Diabetes Institute	<i>Identification of novel regulators of cholesterol metabolism</i>	Dr Eser Zerenturk (Baker IDI) will test genetically engineered cells in mice to improve cardiovascular health outcomes in people with diabetes. His approach will investigate the role of a new regulator of cholesterol levels called DDL1.
<b>Professor Trisha Dunning</b> Deakin University	<i>Improving clinician and older people with diabetes communication and decisions about integrating palliative and end of life care into usual diabetes care</i>	Professor Trisha Dunning will develop tools for diabetes clinicians to integrate palliative care strategies into their everyday practice. Professor Dunning's study will close a gap in the cycle of care as currently a lot of opportunities are missed to discuss planning for palliative and/or end-of-life care for people with diabetes.
<b>Dr Sean McGee</b> Deakin University	<i>Linking obesity with cardiomyopathy through the Alzheimer's disease protein amyloid beta 42</i>	Dr Sean McGee's goal is to restore cardiac function in people with type 2 diabetes through translating therapies originally designed for Alzheimer's disease.
<b>Professor Michael Cowley</b> Monash University	<i>Hyperleptinemia in obesity is a cause of central insulin resistance</i>	Professor Michael Cowley wants to bring insulin resistance to a halt. He is investigating how high levels of the fat-derived hormone leptin are stopping certain brain cells to respond to insulin. In his project, he will block the leptin action in the brains of obese mice to dramatically lower glucose production

		by the liver.
<b>Professor Matthew Watt</b> Monash University	<i>Discovery of a new agent for glycemic control</i>	Another strategy to improve blood glucose control is to understand the role a certain protein plays in this process. It is called SMOC1, and Professor Matthew Watt will continue his research on this important agent for glycaemic control.
<b>Dr Maria Esther Bandala Sanchez</b> The Walter and Eliza Hall Institute of Medical Research	<i>The therapeutic potential of soluble CD52 to prevent type 1 diabetes</i>	Dr Maria Esther Bandala Sanchez is investigating a sugar-coated protein called CD52 which could potentially prevent the development of type 1 diabetes, or even reverses it at clinical onset. She is currently testing her theory in mice, and plans to proceed to clinical trials in humans at a later stage.
<b>Dr Elif Ekinci</b> University of Melbourne	<i>Can we improve the measurement of renal function in patients with diabetes?</i>	Dr Elif Ekinci's works on developing accurate and practical methods to detect changes in renal function in its earlier stages to prevent the development of irreversible chronic kidney disease (CKD).
<b>Dr Sheila Patel</b> University of Melbourne	<i>KLF15 is a genetic and molecular link to cardiac hypertrophy in diabetes</i>	Dr Sheila Patel will look into DNA changes in people with type 2 diabetes. Her goal is to identify high-risk individuals with diabetes much earlier so that treatments can be initiated to prevent heart complications.
<b>Associate Professor Anthony Verberne</b> University of Melbourne	<i>Orexin regulation of pancreatic glucagon secretion</i>	Associate Professor Anthony Verberne will research why people with type 1 diabetes do not secrete the hormone glucagon during a hypoglycaemic episode. Glucagon is vital to restore normal blood glucose levels.
<b>Professor Mary Wlodek</b> University of Melbourne	<i>Exercise in males born small to prevent the programmed pancreatic deficits and metabolic dysfunction in the next generation</i>	Recent studies have highlighted that the adverse health conditions fathers have, including diabetes, can be passed onto their children. Professor Mary Wlodek will now build on these findings and explore what impact exercise in growth restricted males, prior to conception, has on their children's health. Professor Wlodek hypothesizes that endurance exercise in growth restricted males during juvenile life will prevent the transmission of diabetes to their children.