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Media Statement

## **WA RESEARCH COULD IMPROVE TREATMENT FOR DIABETES-RELATED KIDNEY DISEASE**

West Australian researchers have published details of new findings that could help reduce the impact of diabetes related kidney disease (DKD).

DKD is the most common cause of end-stage renal disease in Western countries and affects about a third of people living with either type 1 or type 2 diabetes.

The team from WA's Centre for Diabetes Research, led by Professor Grant Morahan, and supported by Diabetes Research WA, has discovered genes that affect the risk of developing DKD.

"This is the culmination of a twenty year project, which included producing the world's first mouse model for diabetic kidney disease and studying its genetics," Professor Morahan said.

"Our work provides not only this mouse model but showed it has similar DKD susceptibility genes that contribute to the disease in humans. We also showed the disease can be blocked by introducing resistance genes.

"These genes can now be used to define the mechanisms underlying early changes in DKD, and the new animal model will allow development of targeted treatments for DKD. These may enable personalised care for people at risks of developing DKD."

Professor Morahan said disturbances in glucose homeostasis drive early DKD and can often be alleviated by strict glycemic control but, despite this strong relationship between hyperglycemia and renal disease, not all people with poorly controlled diabetes progress to kidney failure.

"Indeed, some individuals with well-controlled diabetes develop progressive kidney disease, so individual genetic factors likely play a role in determining the susceptibility to renal disease in diabetes," he said.

The work has been published in the leading kidney research journal, *Kidney International*. It involved researchers at the Centre for Diabetes Research, including Dr Lois Balmer and Professor Morahan, as well as teams from Brisbane and Melbourne.

Diabetes Research WA executive director Sherl Westlund said the charity was proud to have supported the work.

"As rates of diabetes continue to rise globally, funding research with the power to reduce the health complications of the condition is a priority of ours and this important research shows how critical it is that we support medical research over the long term," she said.

To support the charity's work, head to [diabetesresearchwa.com.au](http://diabetesresearchwa.com.au) or donate to its debut crowdfunding campaign [chuffed.org/project/help-crippa](http://chuffed.org/project/help-crippa) spearheaded by West Coast Eagle Jamie Cripps who has with type 1 diabetes. Every \$10 donation goes into the draw to win a 2019 framed signed West Coast Eagles home Guernsey.

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**Media contact:** Natalie Caudle, 0407 984 435, [natalie@capturemedia.com.au](mailto:natalie@capturemedia.com.au)