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MEDIA STATEMENT

PERTH RESEARCHERS PROBE DIABETES GENE

Local scientists are appealing for help from Perth families as they step up research into a gene found to increase a person's risk of developing Type 1 diabetes.

Grant Morahan, a world expert in the genetics of diabetes and newly-appointed head of the Western Australian Institute for Medical Research's new Diabetes Research Unit, said the gene, called *IL12B*, may help researchers uncover ways to prevent Type 1 diabetes.

Professor Morahan said the gene, which is involved in regulating the body's immune response, was also recently found to contribute to the development of a number of other diseases.

"We thought that, as well as affecting Type 1 diabetes, the *IL12B* gene could contribute to an increased risk of other diseases involving the immune system," he said.

"In collaboration with other WA scientists, we have discovered that *IL12B* variants affect many other diseases, including severe asthma, HIV complications, cerebral malaria and some skin conditions.

"Finding this common gene linking all these different diseases is exciting as it allows us to investigate how this gene works and how to control it. That should help speed up the process of developing preventive treatments."

In people with Type 1 diabetes, the immune system mistakenly attacks the pancreas cells that produce insulin.

A particular variant of the *IL12B* gene leads to a more aggressive immune response, which result in the onset of diabetes.

"We hope we can discover how to divert the auto-immune response exacerbated by the *IL12B* gene," said Professor Morahan.

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“If we can do this, then we can potentially stop people developing Type 1 diabetes,” he said.

Professor Morahan said Perth families affected by type 1 diabetes could help the ongoing genetic research by providing DNA samples.

In particular, families with two or more children who have diabetes are being sought for studies into the genetics of type 1 diabetes.

Professor Morahan is coordinating the Asia-Pacific region’s participation in a worldwide study funded by the US National Institutes of Health.

Recruiting centres have been established at Princess Margaret Hospital and at Fremantle Hospital.

If your family would like to participate in the study please contact Niru Ratnam at PMH on 9340 8090 and Anne-Marie Dunlop at Fremantle Hospital on 9431 3333.

Professor Morahan’s work is being done in collaboration with the Diabetes Research Foundation of Western Australia.

There is no cure for type 1 diabetes.

Also known as juvenile diabetes, it is treated with daily injections of insulin.

Over 100,000 Australians have type 1 diabetes and the number is on the rise, with research revealing the incidence of the disease was increasing by about 3% a year.

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FOR MORE INFORMATION PLEASE CONTACT:

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