

In 2008 WAIMR celebrates 10 years since its inception and the many internationally-important discoveries which have transformed it into WA's premier adult medical research institute.



October 20, 2008

Media Statement

PHD TO FIGHT DIABETES

A Bassendean PhD student will use World Diabetes Day (November 14) to launch the new phase of his medical research project in search of a cure for type 1 diabetes.

Ben Dwyer has now completed the first year of a three-year PhD at the Centre for Diabetes Research at the Western Australian Institute for Medical Research (WAIMR), and has some great progress to show for it.

Mr Dwyer said he hoped to identify special liver stem cells, known as oval cells, which have the ability to be converted into crucial insulin-producing beta cells that could eventually be used in transplantation therapy for type 1 diabetes.

“We are in search of ways to develop a renewable source of insulin-producing cells to help treat and cure people with type 1 diabetes, because the immune has destroyed these crucial cells in people with the condition,” he said.

“My research project has moved into its second year, so I am now trying to identify which types of oval cells are more likely, and more easily, converted to vital insulin-producing cells.

“In the first phase we developed antibodies, which are needed to help us recognize oval cells, so now we’re using them to isolate those cells and help us narrow our search for the best type.”

Mr Dwyer said, although this was the first step, they had already learned a lot from his PhD work.

“We know that the liver and pancreas develop in a similar way, so what we hope to do is utilize pancreatic signals and apply them to liver oval cells with the aim of creating insulin-producing cells – this research offers great promise for the future,” he said.

“The grand plan is that once we work out how to create a renewable source of insulin-producing cells, they can be transplanted into a diabetic patient and allow that person’s body to produce the amount of insulin-producing cells it needs.”

Head of the Centre for Diabetes Research Professor Grant Morahan said Ben’s work was essential to the continued success of the program.

“Ben’s work is investigating crucial questions that will help us break new ground towards a cure for type 1 diabetes, and is a testament to the fantastic research ideas being explored here in WA.”

WAIMR’s Centre for Diabetes Research was established with the support of the Diabetes Research Foundation which will celebrate its 30 year anniversary on World Diabetes Day with a luncheon at Royal Perth yacht Club, where Professor Morahan will inform guests of the team’s progress.

WAIMR Director Professor Peter Klinken and Deputy Director Professor Peter Leedman will also address guests at the luncheon.

-ENDS-

MEDIA CONTACT: Sarah Hayward, WAIMR Media Consultant, m 0411 404 415, o 9388 9280