

November 14th, 2007

Media Statement

WA PATIENTS HELP SCIENTISTS SEARCH FOR DIABESITY TESTS

Hundreds of West Australians with diabetes will help scientists at the State's Centre for Food & Genomic Medicine (CFGM) search for new medical tests to help tackle the growing diabetes epidemic.

The details of the project were announced this morning at the official launch of the CFGM by West Australian Minister for Industry and Enterprise Francis Logan on World Diabetes Day (November 14).

Scientists undertaking the research will make use of WA's new \$1.5m state-of-the-art Proteomics Facility to search for proteins in the blood that might serve as markers of diabetes.

"We believe there are biomarkers, or proteins in the blood, that can act as early warning signs that a person might be more likely to fall victim to diabetes," said Western Australian Institute for Medical Research (WAIMR) Professor and the Centre's Scientific Head, Peter Leedman.

"Using these proteins, new treatments may be able to be developed and simple tests created that could accurately predict and diagnose those at risk of these diseases in a bid to slash some of the serious health problems they cause.

"The biomarkers may also help us predict those with diabetes who will go onto develop serious complications, such as kidney and eye disease.

"Biomarkers are being used in the cancer area, and we are keen to use them to help beat the diabetes and obesity crisis."

The Proteomics Facility, which is part of the Lotterywest State Biomedical Facility, would be integral in allowing the diabetes research to take place.

"Without this proteomics research centre and the cutting-edge equipment it contains, this particular study would just not be possible in WA," said Professor Leedman.

Dr Richard Lipscombe, the Managing Director of Proteomics International, the WA biotechnology company which runs the Proteomics Facility, said it was a welcome resource for local and international scientists.

"This research facility is among the best in the southern hemisphere, so we fully expect it to be used widely. Not only have we opened the door for local researchers to gain the benefits, but also the provision of services to India and China," said Dr Lipscombe.

"It places Western Australia firmly on the proteomics map and helps us develop the critical mass of young talent we need to drive new drug discovery and biomarker research."

WAIMR Director Professor Peter Klinken said WA could now compete with the world leaders in this area of research, as well as attract investment dollars.

"This Facility further strengthens the state's blossoming medical and biotechnology industries and will likely bring large-scale investment in WA," said Professor Klinken.

BACKGROUNDER

The **CFGM**, which last year received \$4.5m funding from the State Government, is based at WAIMR's campus in Nedlands.

Both adults and children with type 1 and type 2 diabetes will take part in the study.

Partners in the Centre include WAIMR, the CSIRO Plant Industry, the University of Western Australia (UWA), Curtin University, Murdoch University, Proteomics International and the WA Department of Agriculture.

The **Proteomics Facility** is a State resource based at WAIMR.

It has been made possible thanks to a \$4million Lotterywest grant to the four public Universities; The University of Western Australia; Murdoch University; Curtin University and Edith Cowan University.

Proteomics is the study of all of the proteins of living systems, cells and tissues.

The Proteomics Facility boasts a state-of-the-art mass spectrometer that can identify a protein in under a minute (in the past such a task would have taken about 24 hours).

Another mass spectrometer housed in the Facility allows scientists to look at a huge number of markers in one blood sample. Historically, individual biomarkers would have needed to be individually isolated and measured.

Following on from the success of the human genome project, the projections for the proteomics market are huge, with the worldwide market for application of proteomics technologies in 2005 estimated as US\$6 billion and rising to \$10 billion by 2010. The market will provide benefits across agriculture, the environment, medicine and commerce.

Lotterywest has contributed more than \$20 million to medical research in Western Australia since 1992.

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