

Media release
Monday 4 June 2007

Tackling Alzheimer's Disease from all directions

Researchers at the Menzie's Research Institute are another step closer to understanding Alzheimer's disease due to gaining a greater insight into the similarity between human brain changes and those exhibited by mouse models of the disease.

Research fellow Dr Tracey Dickson says that this work, conducted by PhD student Adele Woodhouse, represents an important extension of work performed previously in her lab characterising the pathological stages of the disease.

"We have now discovered that the abnormal changes present in the brains of mouse models of Alzheimer's disease are strikingly similar to the early stages of the disease in humans and not necessarily the end point of the disease.

"The reason why this is so significant is this knowledge *may* explain why some therapeutics that have been successful in reducing the disease in these mice have not been successful in treating Alzheimer's disease in humans," she said.

Dr Dickson says the nerve cells in the brain can not replicate, nor regenerate like other cells in a human's body, therefore any potential cure for Alzheimer's would need to be administered early in the disease process before those nerve cells degenerate and dementia occurs.

"Therefore, our work indicates that these mouse models may in fact be more useful than previously appreciated", she said.

Alzheimer's disease is the most common form of dementia in people over 65 years of age.

There are currently more than 200,000 Australians diagnosed with dementia, and as our population ages, it has been predicted that by 2050 the total number of Australians living with dementia will exceed 730,000.

Dr Dickson says dementia, particularly Alzheimer's disease represent a significant social and economic burden to Australia.

“At Menzies, a variety of researchers from various areas of work are looking into the causes and prevention of Alzheimer’s disease as well as the relief of suffering associated with dementia.

“Others, such as Dr Andrew Robinson Honorary Menzies Fellow and Associate Professor of Aged Care Nursing Research in the School of Nursing and Midwifery, are conducting research into the effectiveness of current health services for the growing number of people with dementia, including ways to streamline and integrate the provision of quality health care.

“Menzies is trialling intervention initiatives such as earlier diagnosis of memory loss and other symptoms, leading to improved services and early-stage care. Menzies health care professionals are also facilitating and coordinating educational programs designed to support health care providers and carers of people with dementia,’ she said.

The insight provided by this particular study in mice will enable researchers both locally and internationally to utilise these models in a more effective and specific manner, and in doing so, significantly improve our ability to search for an early intervention to stop the progression of this devastating disease.

Dementia studies at Menzies have funded by the National Health and Medical Research Council, Masonic Centenary Research Trust, JO and JK Wicking Trust and Royal Hobart Hospital Research Foundation BG Thomas Bequest.

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Dr Tracey Dickson is available for interview:

Where: Neuroscience Laboratory, Clinical School
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For directions report to reception at main entrance on ground floor of the Clinical School or call Melita’s mobile.

When: TODAY (Monday 4 June)
10.00am

For more information contact:

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