



News Release

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Brain scanner to give clearest picture of dementia to date

A hi-tech scanner could enable scientists to develop better treatments for dementia and other brain conditions.

The new equipment – the first of its kind in Scotland – will give scientists the clearest picture yet of what goes wrong in the brain when dementia occurs.

Researchers will be able to use the device to look in detail at what is going on inside patients' brains. It will also help doctors to identify patients who are most likely to benefit from new therapies, and to monitor the effects of their treatment.

The system combines Magnetic Resonance Imaging (MRI) scans with Positron Emission Tomography (PET) imaging to produce high-resolution pictures of the tissue of the brain. It will allow researchers to track the movement of individual molecules within the brain's cells.

Other organs of the body can also be studied with the device, enabling insights into diseases of the heart, blood vessels, lung and various types of cancer.

The scanner will be housed by the Clinical Research Imaging Centre at the University of Edinburgh.

The Medical Research Council has awarded £6.8 million to support the programme as part of the Dementias Platform UK Imaging Network. This funding will also support stem cell research into the aging brain.

Professor Ian Deary, Director of the University of Edinburgh's Centre for Cognitive Ageing and Cognitive Epidemiology, who led the bid, said: "Advanced brain imaging and stem cell research are likely routes to better understanding of the causes and progress of dementias. It is heartening to see the huge and fast-growing challenge of cognitive decline and dementia being tackled head-on by the MRC's Dementias Platform UK."

Professor Edwin van Beek, Co-Director of the University of Edinburgh's Clinical Research Imaging Centre, said: "The MRI-PET scanner will complement existing facilities at the University of Edinburgh, which are helping research across the spectrum of human health from pregnancy to aging."

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