Medical Xpress

Next generation of dementia scientists to focus on lifestyle factors

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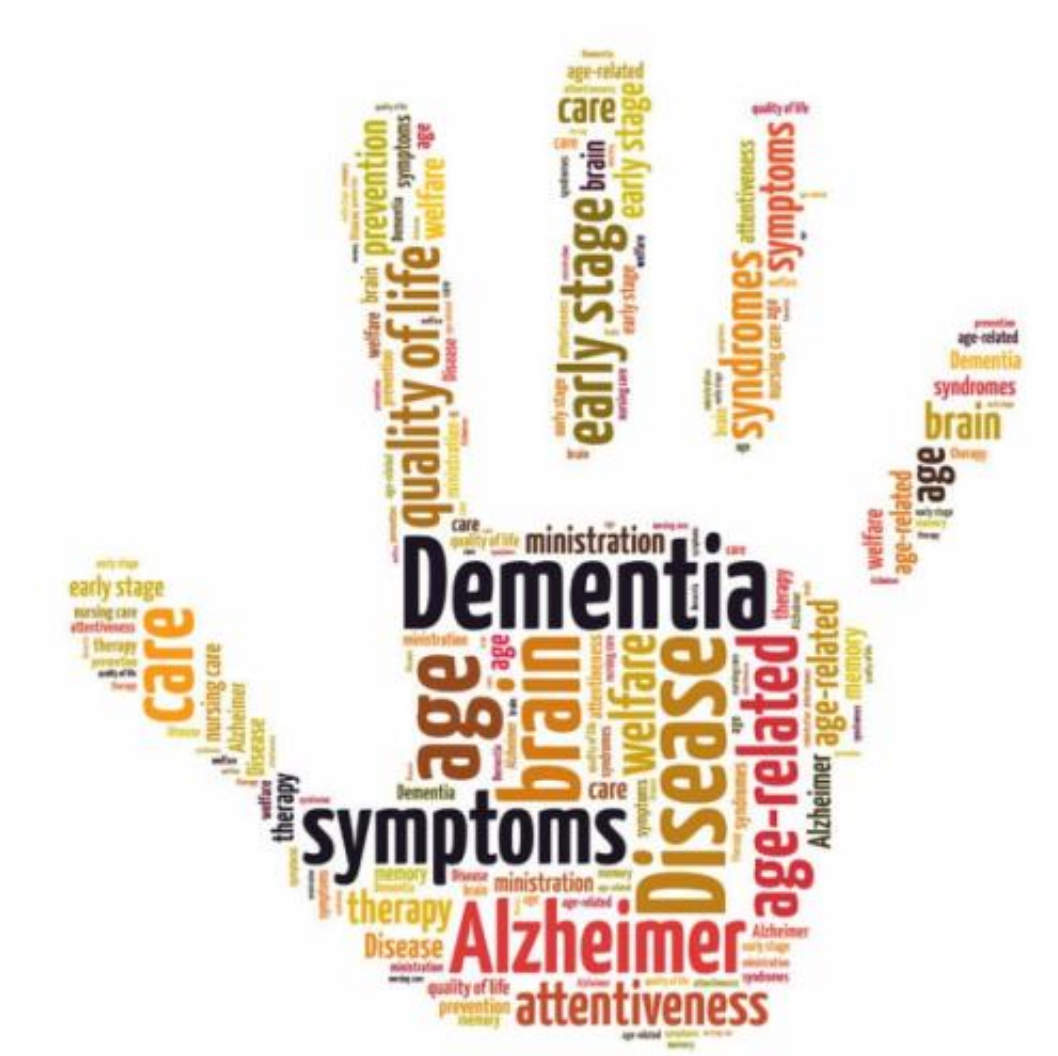

Scottish universites join forces for dementia research

Scottish scientists investigating the causes of dementia will study how lifestyle factors impact on memory and brain degeneration as seen in dementia.

Four universities - Aberdeen, Edinburgh, St Andrews and Dundee -are to join forces to study how diet, exercise and other factors affect brain function and cognitive performance, blood flow and degeneration of brain tissue, and whether such changes are reversible.

The project – which has been funded by the Alzheimer's Society – will establish a new doctoral training centre (DTC) for PhD students across the partner universities.

The centre is one of eight newly funded by Alzheimer's Society around the UK that will support 55 PhDs and Clinical Fellows to conduct cutting edge research into all types of dementia.

This is the single biggest funding commitment that has been made to support dementia early-career dementia researchers in the UK.

The new research programme will investigate various aspects of the relationship between healthy vs unhealthy diets and the corresponding changes within the brain that cause dementia.

Some PhD students will investigate the role of diet and other lifestyle factors in regulating blood flow, and the way this alters brain function.

Others will look at dementia in mice and whether lifestyle adjustments or drugs aimed at combatting reduced blood flow can improve diet-induced memory deterioration.

The team hopes that by better understanding the interaction between lifestyle choices and brain function, they can uncover new targets for

drug therapies.

Prof Bettina Platt, who oversees the research at the University of Aberdeen, said: "We are hopeful that our Scotland-wide training centre can provide long overdue evidence for or against the contribution of (un-)healthy diets, as well as support the next generation of dementia researchers. It is commonly assumed that life style and diet are to blame for the ever increasing number of dementia sufferers, however, hard evidence for the underlying mechanisms and ways to prevent this debilitating condition is not available."

Prof Karen Horsburgh, of the Centre for Neuroregeneration at the University of Edinburgh, who is leading the centre, said: "Understanding more about the causes of Alzheimer's disease and ways to prevent it from developing, either through lifestyle changes or drug treatments, is incredibly important in order to reduce the number of people living with the condition."

Dr Doug Brown, Director of Research and Development at the Alzheimer's Society said: "There's a huge amount of progress being made by the dementia research community but unless we attract and train the best young talent we will limit how quickly we can make ground breaking discoveries. For too long dementia research has been underfunded and as a result we have significantly fewer scientists than other conditions, with six times more people working in cancer than dementia.

"If we're going to defeat dementia we need to give the best brains the right opportunities and build a research workforce that is fit for the future. That's why we're proud to be announcing the largest investment of its kind, which will see £5 million committed to create the next generation of dementia researchers. People with dementia deserve nothing less than an all-out fight back against the condition and our

Doctoral Training Centres will help us enlist the right people to lead it."

Provided by University of Aberdeen