

Studies

[Alzheimer's Disease Puzzle: Delving into Pathogenesis Hypotheses](#)

This article provides a thorough study on the major hypotheses of AD pathogenesis, with highlights of strengths, weaknesses, and potential interconnections. Although the exact cause or precise mechanism of AD is not fully understood, recent studies have made significant strides in elucidating the underlying molecular mechanisms of this disease. With a more nuanced understanding of the complex interplay among different factors that contribute to AD pathogenesis, more targeted approaches for the prevention and treatment of this disease, such as personalized medication approaches, have been developed, and new targets for AD treatments have also been identified.

[Small vessel cerebrovascular disease is associated with cognition in prospective Alzheimer's clinical trial participants](#)

Increased frontal and parietal lobe White matter hyperintensities (WMH) volume was associated with poorer performance on the preclinical Alzheimer cognitive composite. While amyloid positivity was also associated with lower cognitive test scores, WMH volumes did not interact with amyloid positivity status.

[Unveiling the sound of the cognitive status: Machine Learning-based speech analysis in the Alzheimer's disease spectrum](#)

The results of this study showed that, based on a paralinguistic analysis of sound, it is possible to identify individuals with ADD ($F1 = 0.92$) and MCI ($F1 = 0.84$). Furthermore, our models, based on physical acoustic information, exhibited correlations greater than 0.5 for predicting the cognitive domains of attention, memory, executive functions, language, and visuospatial ability.

[The relationship between playing musical instruments and cognitive trajectories: Analysis from a UK ageing cohort](#)

Analysis identified an association between musicality and cognition in this cohort. Playing a musical instrument was associated with significantly better performance in working memory and executive function. Significant associations were also found between singing and executive function, and between overall musical ability and working memory.

elderly vascular geriatrics
Alzheimer's environment
cognition early onset
fronto-temporal research
memory old age
dementia
lewy bodies support



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5 February 2024

News

[NIDUS-Family programme could enable people with dementia to live more independently](#)

A recent New Interventions for Independence in Dementia (NIDUS-Family) programme aimed at helping people with dementia live independently at home for as long as possible has generated positive trial results that could be a lifeline for carers.

[Alzheimer's can pass between humans in rare medical accidents, suggests study](#)

Alzheimer's can be spread from human to human through rare medical accidents, research suggests, although experts stress there is no evidence the disease can be passed between people through everyday activities or routine care. Researchers say a handful of people who received human growth hormone from the pituitary glands of deceased donors have gone on to develop early onset Alzheimer's – likely because the hormones used were contaminated with proteins that seeded the disease in their brains.

[More people able to take part in dementia research thanks to new government funding](#)

The government announced that £49.9 million will go towards expanding the number of dementia research sites across the UK. This will give more people the chance to take part in clinical trials, ultimately helping fuel our journey towards a cure for the diseases that cause dementia. This new pot of funding will be used by the [Dementia Translational Collaboration Trials Network](#), an initiative run by The National Institute for Health and Care Research, to offer more people with dementia the opportunity to take part in early phase clinical trials. By doing so, it will “accelerate therapy development for dementia, enable participation for all regardless of location or demographic, and reframe the UK as the 'go-to' place for gold standard conduct of early phase trials” said Dr Catherine Mummery who will lead the initiative.

[Navigating social media use for people living with dementia](#)

New research supported by Join Dementia Research highlights the need for social media guidance specifically for carers of people living with dementia.

[Women are more likely to develop Alzheimer's – but our research suggests a specific brain enzyme could help protect them](#)

Women are most likely to be affected. They make up two-thirds of people with Alzheimer's. It is not yet understood why women have greater risk of developing the disease – but there does seem to be a link with the menopause. [Our latest research](#) has examined this link [and it suggests](#) that the activation of a brain protein called CYP46A1, using an anti-HIV drug, could help protect women from developing disease. Women transition into menopause, usually between 45 and 55 years of age. Menopause is caused by loss of oestrogen, a hormone essential for maintaining brain health as well as learning and memory skills.

