

ALZHEIMER'S SCIENCE IFVS SPRING 2025



NEW HOPE FOR REDUCING DEMENTIA RISK

Exciting research has identified two new modifiable risk factors for dementia: untreated vision loss in later life and high cholesterol in midlife. With these findings, experts now recognize 14 risk factors that can be addressed to reduce the chances of developing dementia.

Alzheimer's Disease Research–funded scientist Quincy Samus, PhD, emphasizes the potential impact. "Reducing dementia risk at both individual and population levels is achievable. It's never too early—or too late—to act."

Studies suggest that up to 45 percent of dementia cases could be delayed or prevented by addressing multiple risk factors like managing one's cholesterol, improving vision care, and adopting a healthier lifestyle.

These discoveries are particularly important as dementia continues to rise globally, especially in vulnerable communities. Addressing these factors can have a significant impact on reducing health inequities and improving outcomes for at-risk populations.



Your support helps fuel research breakthroughs, like innovative therapies to slow cognitive decline.

Your generosity fuels this vital research and helps raise awareness about brain health. Together, we can create brighter futures for individuals and families facing dementia.

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PRESIDENT'S CORNER

Your generosity fuels critical discoveries that bring hope to people with this mind-stealing disease, as well as those who love them.

As you'll see in this newsletter, scientists we fund are working to develop new diagnostic tests and biomarkers to identify and better understand novel aspects of Alzheimer's. They're also researching how to slow and mitigate the disease. Plus, on page 3 you'll read about the breakthrough research being done to develop a noninvasive Alzheimer's treatment.

Thank you for supporting research and helping to provide mind-saving information to the public. Now more than ever, we need to support science. Together, we will stop this disease!

Stacy Pagos Haller

COULD TREATING BLOOD CLOTS IN THE BRAIN DELAY ALZHEIMER'S?

Blood flow is essential for brain health, as it delivers key nutrients that support cognitive function. In the early stages of Alzheimer's disease, tiny clots can form in the brain that reduce blood flow and accelerate cognitive decline. However, physicians don't have the necessary diagnostic tools to identify who might benefit from treatments that target these blood clots.

Marta Casquero-Veiga, PhD, an Alzheimer's Disease Research grant recipient, aims to change that. At the Jiménez Díaz Foundation Health Research Institute in Madrid, Spain, she is developing innovative nanoradiotracers to detect and image clots in Alzheimer's models using PET and MRI scans.

Her goal is to create a noninvasive diagnostic tool that could help physicians prescribe anti-clotting medications to slow disease progression.

Dr. Casquero-Veiga's work builds on previous discoveries that demonstrated how the early targeting of blood clots could delay cognitive decline. Her commitment to translating research into clinical solutions offers hope for transforming Alzheimer's care and improving lives.



Marta Casquero-Veiga, PhD

RESEARCHER SPOTLIGHT: Keith Hengen, PhD

Keith Hengen, PhD, and his team at Washington University in St. Louis are pioneering a bold approach to understanding Alzheimer's disease. Their innovative research investigates how the brain's natural ability to organize around "criticality"—a state optimizing information processing might be disrupted in neurodegenerative diseases like Alzheimer's.

Their work hypothesizes that early-life disruptions in brain activity may predict, and even contribute to, disease progression. By studying data, his team aims to identify



Keith Hengen, **PhD**

aberrant brain dynamics as a potential biomarker for Alzheimer's risk, well before the accumulation of disease-related proteins. This groundbreaking approach could lead to earlier interventions targeting brain activity to prevent or delay disease onset.

A leader in neuroscience, Hengen has dedicated his career to uncovering how neuronal networks function and adapt. His lab's cutting-edge work bridges complex brain dynamics and neurodegeneration, offering new hope for combating Alzheimer's.

EXCITING NONINVASIVE ALZHEIMER'S TREATMENT SLOWS DECLINE

Alzheimer's Disease Research leaders attended the Clinical Trials on Alzheimer's Disease (CTAD) conference in Madrid, Spain, where researchers unveiled new strategies to combat this mindstealing disease. Among the highlights were advancements in blood tests, innovative therapies, and a focus on combination treatments.

A notable breakthrough came from researchers whose brain stimulation therapy slowed cognitive decline in Alzheimer's patients over a yearlong Phase 2 trial. This noninvasive treatment, supported by Alzheimer's Disease Research, offers hope for a future with fewer side effects and better outcomes.

As the first global nonprofit funder of this work, Alzheimer's Disease Research invested in this project early on, demonstrating that our first-in approach to supporting bold research worldwide makes a critical impact in the fight against Alzheimer's.

Together, we can continue to empower the research that makes these discoveries possible. Now more than ever, we need to support science as there is less government funding.



Your support fuels critical research that brings us closer to better treatments and hope for a cure.



Sign up for our FREE monthly virtual discussion series with experts to stay informed about the latest findings—from treatments and genetics to risk reduction, supplements, and more! You can also ask questions during a live Q&A. All sessions are recorded and available to watch on demand.

To register and catch up on previous episodes, visit: **brightfocus.org/ADRzoom**

HELP FIGHT ALZHEIMER'S THROUGH A WILL OR BEQUEST

Would you like to help defeat Alzheimer's while benefiting from estate tax savings? If so, consider supporting Alzheimer's Disease Research through a will or bequest.

It's one of the easiest gifts to make. With the help of an advisor, you can include language in your will or trust that specifies that a gift be made to our organization as a part of your estate plan.

A bequest can be made in several ways. You can:

- Gift a specific dollar amount or asset
- Gift a percentage of your estate
- Gift the balance or residue of your estate
- Designate certain assets, such as appreciated securities

With our partner, FreeWill, you can easily create a will online. Visit **FreeWill.com/BrightFocus** to get started on your will today.

If you have any questions, please contact us at **301-556-9362**.



Leave a lasting legacy to be remembered through a will or bequest.



brightfocus.org/stopAD

Please share this newsletter with someone you know who might be interested in learning about some of the latest advancements in research to diagnose, prevent, treat, and cure Alzheimer's disease

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