

# ALZHEIMER'S SCIENCE NEWS

SUMMER 2025



## WOMEN'S ALZHEIMER'S RISK TIED TO IMMUNE SYSTEM

A new study funded by Alzheimer's Disease Research has uncovered a striking discovery: women who carry the *APOE4* gene, which is known to increase Alzheimer's risk, show signs of accelerated immune aging that may set the stage for cognitive decline.

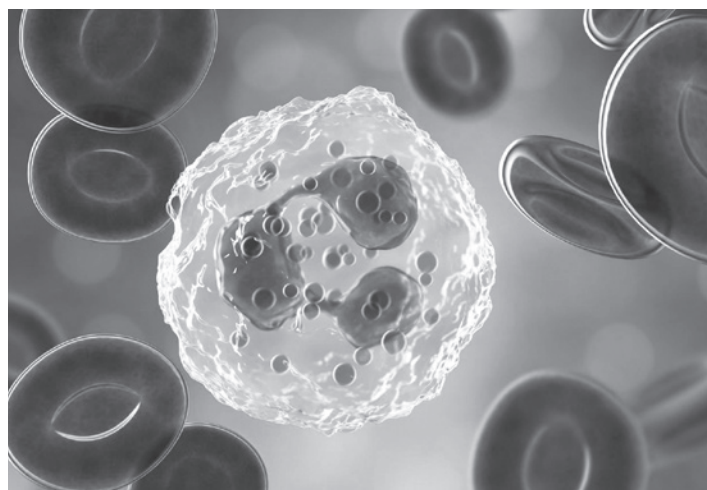
Led by postdoctoral researcher Neta Rosenzweig, PhD, at Harvard Medical School, the study sheds light on why women are more likely than men to develop Alzheimer's, pointing toward a promising future of personalized medicine.

Dr. Rosenzweig and her mentor, Alzheimer's Disease Research grantee Oleg Butovsky, PhD, explored how blood immune cells interact with the brain's immune cells. Their work suggests that blood immune cells infiltrate the brain and prevent the removal of amyloid plaques, driving cognitive impairment for people with the Alzheimer's risk gene *APOE4*. This interaction likely contributes to the increased risk of Alzheimer's in women as it appears earlier and stronger in women and marks

the conversion from normal cognition to mild cognitive impairment.

These findings don't just explain a key biological difference; they offer hope. By identifying this damaging immune response early on, researchers could develop treatments that target inflammation in high-risk women before Alzheimer's symptoms appear.

And it's only possible because of people like you. Thank you for helping to power the future of Alzheimer's research.



**Early immune aging in women  
with *APOE4* may offer clues for future  
Alzheimer's therapies.**

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## PRESIDENT'S CORNER

We're making tremendous progress against Alzheimer's—and we have *you* to thank for that!

As you'll read about in this newsletter, scientists you support are learning how Alzheimer's impacts different groups of people. Understanding how the disease progresses leads to possible new treatments.

You'll also learn about our free monthly virtual discussions, **Zoom In on Dementia & Alzheimer's**, which provide vital information from experts about treatment updates, lifestyle changes, and other ways to protect your brain health.

Thank you for helping pave the way toward a brighter future for people living with Alzheimer's. Your support is more important than ever right now, as federal research funding is being cut.

Stacy Pagos Haller

## HOPE FOR ADULTS WITH DOWN SYNDROME

Adults with Down syndrome are living longer but face a much higher risk of developing Alzheimer's disease due to an extra copy of amyloid precursor protein. A new RAND report, commissioned by BrightFocus Foundation and partners, shows that increased investment in research could extend life expectancy and reduce caregiving needs by up to 40 percent.

Currently, Alzheimer's treatments are not being tested in people with Down syndrome due to various complications. But thanks to advocacy and donor support, progress is on the horizon, and the first clinical trial testing an immunotherapy for Down syndrome-Alzheimer's disease was initiated this year.

With your help, boosting research investment into the health and well-being of adults with Down syndrome would improve their quality-of-life outcomes, reduce caregiving costs, and extend their lifespan by five years.

Every gift you make supports inclusive research and brings us closer to a future without Alzheimer's. Thank you for making hope possible for families who need it most.



With your support, research gives  
hope for the future.

# PREVIEW OF NEW RESEARCH

Every research breakthrough begins with a bold idea, and your generosity is helping spark some of the most innovative thinking in the field.

Here's a look at one of the exciting new research projects we're funding.

It explores how blood-clotting proteins, which accumulate in the brains of individuals with Alzheimer's disease, may drive neurodegeneration



**You help scientists in the fight to end Alzheimer's.**

by triggering inflammation that damages myelin—the protective coating surrounding nerve fibers.

This study is just the beginning, and we look forward to sharing more in the months ahead. Because of your support, hope is on the horizon.

Thank you for standing with us as we continue to pursue better understanding, earlier detection, and lifesaving treatments.

## HYGIENE TIPS FOR THOSE WITH ALZHEIMER'S

As Alzheimer's progresses, daily tasks like bathing, dressing, and grooming can become overwhelming for both the individual and their caregivers. But small adjustments can make a big difference.

Using warm rooms, soft towels, and favorite bath products can help ease the bathing process. If showers become stressful, sponge baths provide a gentle alternative. Providing simple clothing with easy closures and limiting the number of outfit choices can reduce confusion. Even brushing your teeth together can encourage participation and routine.

These thoughtful approaches can preserve dignity and comfort while supporting independence wherever possible.

Thanks to the generosity of donors, families can continue to receive support grounded in compassion and respect, empowering caregivers to provide care with kindness and confidence, one meaningful moment at a time.

**Simple changes to daily routines can promote safety, comfort, and dignity for loved ones living with Alzheimer's.**





# HELP FIGHT ALZHEIMER'S THIS MAKE-A-WILL MONTH

August is National Make-a-Will month, so we're encouraging everyone to make a will to create an impact on the future for their loved ones.

By documenting your wishes in a will, you can protect those you care about, plan for all of your assets, and even include an optional gift to Alzheimer's Disease Research to build your legacy.

It only takes 20 minutes. We've partnered with FreeWill because their secure online resource can help you create your own will for free.

To make your will quickly and securely, visit: [FreeWill.com/brightfocus](https://FreeWill.com/brightfocus).

To learn more about wills, contact us at 301-556-9362 or [plannedgiving@brightfocus.org](mailto:plannedgiving@brightfocus.org).



Leave a lasting legacy to be  
remembered through a will.



## Zoom In on Dementia & Alzheimer's

Sign up for our FREE monthly live conversation series with renowned research scientists and clinicians to keep you 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](https://brightfocus.org/ADRzoom)

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.

This newsletter is published by Alzheimer's Disease Research, a program of BrightFocus Foundation.

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