



THANK YOU!!



February 28th, 2025.

RYAN YOUNGBLOOD

1599 Clifton Rd.

Atlanta, GA 30322

Dear Mr. Youngblood:

Funding for Project Number Grant Number: 5R24AG066599-03 is hereby terminated pursuant to the 2022 National Institutes of Health (“NIH”) Grants Policy Statement,¹³ and 2 C.F.R. § 200.340(a)(2) (2023). This letter constitutes a notice of termination.¹⁴

The 2022 Policy Statement applies to your project because NIH approved your grant on 07/27/2023 and “obligations generally should be determined by reference to the law in effect when the grants were made.”¹⁵

The 2022 Policy Statement “includes the terms and conditions of NIH grants and cooperative agreements and is incorporated by reference in all NIH grant and cooperative agreement awards.”¹⁶ According to the Policy Statement, “NIH may ... terminate the grant in whole or in part as outlined in 2 CFR Part 200.340.”¹⁷ At the time your grant was issued, 2 C.F.R. § 200.340(a)(2) permitted termination “[b]y the Federal awarding agency or pass-through entity, to the greatest extent authorized by law, if an award no longer effectuates the program goals or agency priorities.”

This award no longer effectuates agency priorities. NIH is obligated to carefully steward grant awards to ensure taxpayer dollars are used in ways that benefit the American people and improve their quality of life. Your project does not satisfy these criteria.

- Transgender issues: Research programs based on gender identity are often unscientific, have little identifiable return on investment, and do nothing to enhance the health of many Americans. Many such studies ignore, rather than seriously examine, biological realities. It is the policy of NIH not to prioritize these research programs.

Senate Democrats, researchers warn NIH cuts are wreaking havoc in the fight against disease

BY: ERIK GUNN - MARCH 27, 2025 5:45 AM



RESEARCH & DEVELOPMENT

NIH cuts disrupt Alzheimer's research at Emory, training for scientists at UGA

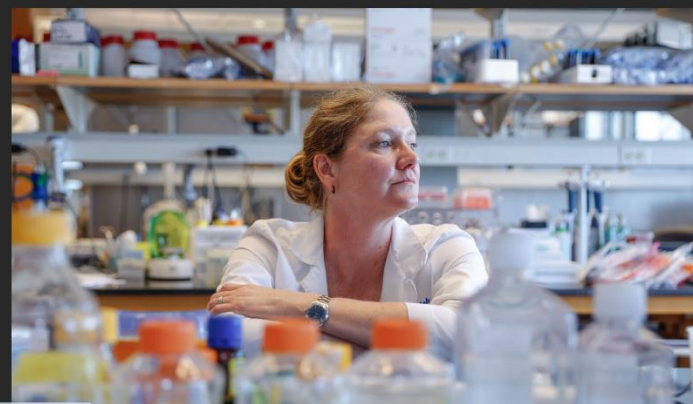
By Rebecca Grapevine | April 3, 2025, 12:41pm EDT



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THE FIRST 100 DAYS An Emory research study on Alzheimer's comes to abrupt halt after feds yank funding



Terminated NIH grants must be restored, judge orders



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NEWS Georgia scientists face renewed research cuts after Supreme Court ruling

Terminations of federal grants at Georgia colleges, universities could soon top \$100 million as Trump administration targets funding for diversity, equity, gender.



“The systematic elimination of these high-risk” groups of patients from research “will only serve to increase the total number of [Alzheimer’s] patients every year,” Wharton said. Understanding those disparities is especially important, she added, because with shifting demographics racial and ethnic minority groups will represent the majority of the population.

“These terminations will have very grave consequences for patients, for families, for communities, and for taxpayers,” Wharton said.

a neuroscientist at Emory who focuses on Alzheimer's disease prevention, said she would all Institutes of Health research grant funding that was canceled and then reinstated this ime. “We are on this roller coaster, and it is literally impossible to plan,” Wharton said. “It d then two steps back. And I still don't know what to do at this point.” (Natrice

Our Mission has NOT changed.
Brain health is a non-partisan issue.
Rest assured, we are all pushing forward to find a viable
cure and prevention strategies.



AAIC
2025
Major
Scientific
Updates

Key themes from the conference:

- Earlier detection of Alzheimer's disease
- Translation of therapies into real-world clinical practice
- Preventive lifestyle interventions
- Sex-based and biological risk differences
- Expanding accessibility of diagnostic technologies

Alzheimer's Disease Stats

- ~7.2 million Americans currently living with Alzheimer's disease
- Leading cause of dementia worldwide
- Global dementia cases expected to exceed 130 million by 2050
- Early detection and prevention increasingly emphasized

Future Research Directions

Major priorities emerging from AAIC:

- Scaling blood-based biomarker testing

- Earlier intervention trials

- Precision medicine approaches

- Understanding sex and race-related risk differences

- Integrating lifestyle and pharmacologic treatments

U.S. Study to Protect Brain Health Through Lifestyle Intervention to Reduce Risk (U.S. POINTER) Study

- Large-scale, RCT to demonstrate that an accessible and sustainable healthy lifestyle intervention can protect cognitive function in diverse populations.
- Both interventions focused on physical exercise, nutrition, cognitive challenge and social engagement, and heart health monitoring, but differed in intensity, structure, accountability and support provided.
- *Structured lifestyle intervention.* Participants attended 38 facilitated peer team meetings over two years, and were provided with a prescribed activity program with measurable goals for: aerobic, resistance and stretching exercise; adherence to the MIND diet; cognitive challenge through BrainHQ training and other intellectual and social activities; and regular review of health metrics and goal-setting with a study clinician.
- *Self-guided lifestyle intervention.* Participants attended six peer team meetings to encourage self-selected lifestyle changes that best fit their needs and schedules. Study staff provided general encouragement without goal-directed coaching.
- **Cognitive benefits were consistent across age, sex, ethnicity, heart health status and apolipoprotein E-e4 genotype**

Combination of Heart-Health Drugs May Also Protect the Brain

- Taking a combination of common drugs used to treat blood pressure, cholesterol and diabetes may have an added benefit: slower cognitive decline.
- A study of more than 4,500 older adults showed cognitive test scores similar to people three years younger for participants who took a combination of drugs targeting vascular or metabolic conditions, all of which are known risk factors for dementia.

Lead Pollution Linked to Memory Problems in Older Adults

- 600,000 adults links early-life environmental lead exposure to memory problems later in life.
- People who grew up in areas with moderate to extremely high atmospheric lead levels from 1960-1974 (when leaded gasoline use was at its highest) were 20% more likely to report memory problems as adults 50 years later.
 - higher the density of automobile traffic, such as in urban areas, the higher the atmospheric lead.
- Another study found that older adults who live about three miles from a lead-releasing facility — such as glass, ready-mixed concrete or computer and electronics manufacturers — are more likely to have memory and thinking problems than those who live farther away.
- Lead exposure may leave a lasting molecular imprint on the brain, making it more vulnerable to age-related diseases, including Alzheimer's.

Participants in SNAP Food Assistance Program Had Slower Cognitive Decline

- Health and Retirement Study to compare participants in SNAP, which helps low-income individuals and families buy food, to those who were eligible for the program but didn't participate.
- The study group of 1,131 SNAP participants studied included white, Black and Hispanics individuals. A control group included 1,216 people who were SNAP-eligible but didn't participate. Researchers found all groups benefitted, but White participants showed slower decline than other groups. The findings highlight the potential benefits of food assistance programs to support older adults' cognitive health.
- SNAP participants had slower cognitive decline over 10 years than non-participants. The difference is significant in the long-term, adding up to an estimated two to three additional years of cognitive health over the study's 10-year period.

Cognitive Health Differences Between Men and Women

- Traumatic brain injuries (TBIs, a well-known risk factor for dementia) were more likely to shrink dementia-related areas of the brain in women than men.
- Women comprise two-thirds of the 7 million Americans living with Alzheimer's.
- “Chemobrain” — declines in thinking and memory reported by about one-third of women receiving breast cancer chemotherapy.
- The chemobrain study showed that brain changes (inflammation and shrinkage) related to the cancer treatment are connected to symptoms like memory lapses and trouble focusing or finding words. The study adds to growing evidence that chemotherapy impacts brain health.

What does all this mean when taken together?



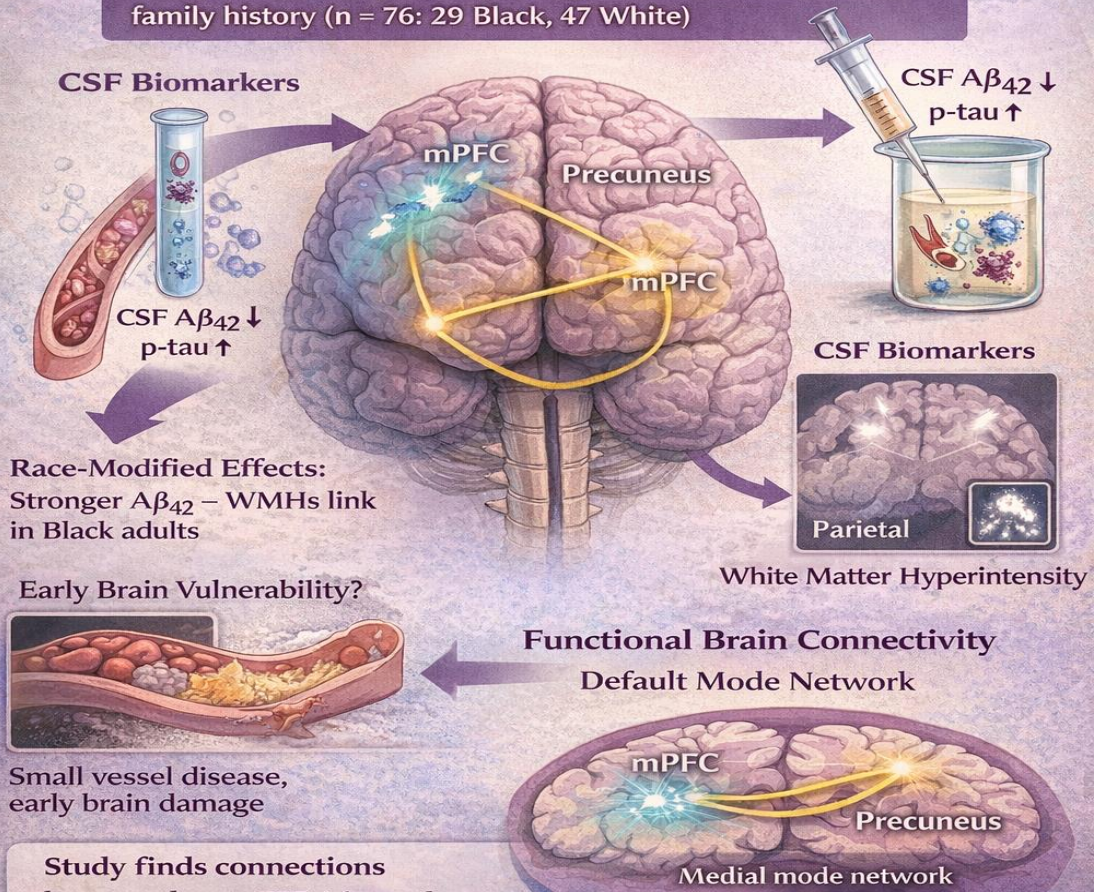
Brain health risk starts EARLY, and it's partially systemic

- Vascular and inflammatory pathways are central drivers
- Intervention matters, but timing may be more important than mechanism (sans BP meds).
- This means for you: Getting treated early matters more than the exact treatment type
- Biology is not uniform and disparities are real and mechanistic
 - Race modifies vascular–amyloid relationships.
 - Women show different vulnerability (TBI, hormones, inflammation) Not just social, also biological
 - Risk pathways differ by sex and race and begin in midlife

Amyloid, Vascular Injury, and Racial Disparities in Midlife Alzheimer's Risk



Study of middle-aged, cognitively normal adults with AD family history (n = 76: 29 Black, 47 White)



Study finds connections between lower CSF $A\beta_{42}$ and regional structural brain injury in midlife

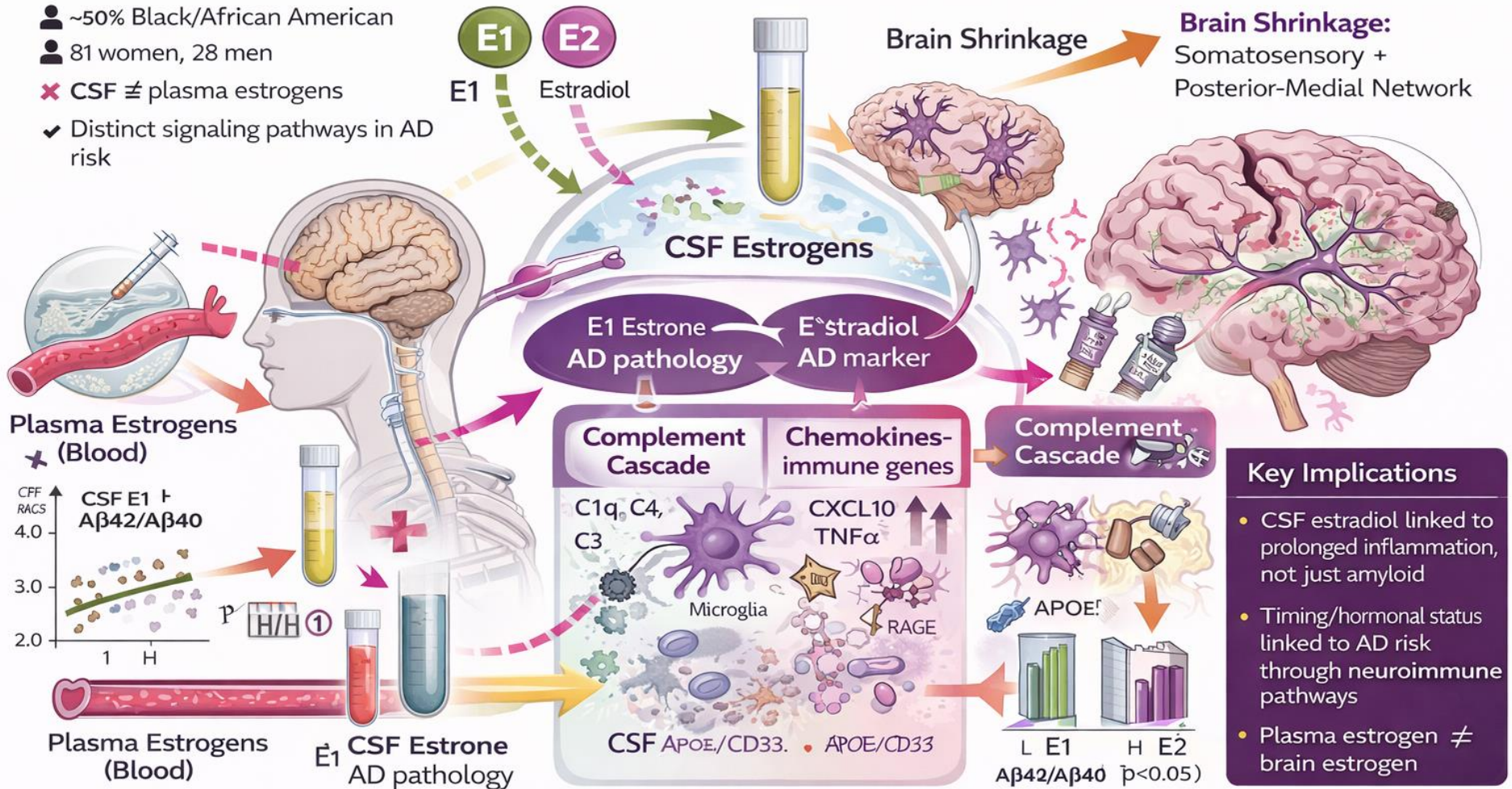
➔ $A\beta$ -related brain changes may manifest first as vascular injury,

Strongest WMHs associations found in Black adults

➔ Highlighting early, biology-driven AD risk disparities

CSF Estrogens Link Neuroinflammation to Brain Networks in AD Risk

- ~50% Black/African American
- 81 women, 28 men
- CSF \neq plasma estrogens
- Distinct signaling pathways in AD risk



**Distinct AD vs inflammation signals linked to CSF Estrone (E1) vs Estradiol (E2).
Brain estrogen linked to neuroinflammation signaling & brain shrinkage**

Take Away
from our
Work, and
the work
of others

- Alzheimer's disease emerges from early-life interactions between vascular, inflammatory, and hormonal systems, with risk trajectories shaped by sex and race, and modifiable through timely systemic intervention rather than treatment type alone