

Memory Matters



A publication of the Johns Hopkins Memory & Alzheimer's Treatment Center and Alzheimer's Disease Research Center

Fall/Winter 2024

Disclosure of Amyloid PET Results in Memory Research

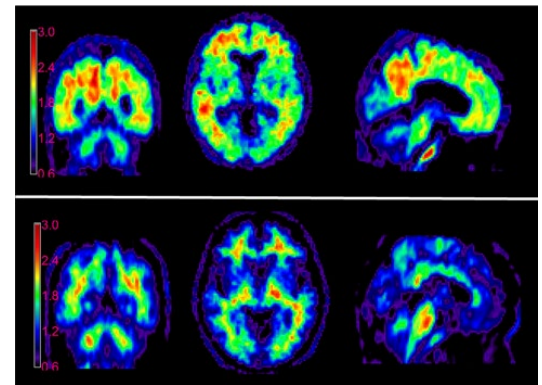
Since the early 2000s, it has been known that amyloid accumulation in the brain, measured using specific Positron Emission Tomography (PET) brain imaging tracers, reflects the presence of amyloid plaques. Since amyloid plaques are one of the hallmarks of Alzheimer's disease (AD), researchers have examined patterns of amyloid accumulation in the brain, and conducted clinical trials to determine whether treatment with amyloid-lowering therapies reduces amyloid levels and improves symptoms of memory loss. They have also examined whether amyloid scans can inform future risk of memory loss among those with no memory problems.

These and other research advances are now bringing amyloid PET imaging into clinical practice. The recently approved medications for AD require evidence of elevated brain amyloid, based either on a PET scan or a spinal tap. Additionally, research studies that conduct amyloid PET imaging are increasingly providing participants with the option of learning the results of their amyloid PET scan. This involves learning whether their scan indicates that levels of amyloid are 'elevated' or 'not elevated.'



Why is this information important? Individuals with 'elevated' amyloid levels are undergoing brain changes related to AD. For those *with* memory loss, evidence of elevated amyloid means the likely cause is AD. For individuals *without* memory loss, evidence of elevated amyloid may mean an increased risk for developing AD in the future. Learning about elevated amyloid levels may encourage monitoring of daily function, engagement in medical and financial planning, as well the identification of support resources. Knowing about a positive amyloid scan may also provide an opportunity to pursue novel AD treatments, if of interest.

In contrast, individuals with 'not elevated' amyloid levels have no current evidence of elevated amyloid. While this does not preclude the possibility of amyloid depositing in the future, this information may come as a relief to individuals who are worried about future memory loss (for example, due to their family history). It may also motivate individuals experiencing cognitive decline to explore alternative causes of their memory loss symptoms.

Currently, amyloid scan results are provided together with education on the meaning of the results for helping to ensure accurate interpretation. To learn more about local opportunities to participate in aging and memory loss research, visit alzresearch.org/participate-in-research.



Positron Emission Tomography (PET) scan images show brains that are positive (top) and negative (bottom) for amyloid accumulation.

  **Get Social With Us!** Follow us on [Facebook](https://www.facebook.com/JHMemoryandAging) (JHMemoryandAging) and [@JH_Memory_Aging](https://twitter.com/JH_Memory_Aging) for the latest information, resources, events and research opportunities related to healthy aging, memory loss and dementia.

Please share *Memory Matters* with your family and friends! Download electronic copies from the ADRC website – alzresearch.org/newsletter. To request extra print copies, please contact **Claire Liu** at **410-550-3511** or cliu224@jh.edu.

THE BENEFITS OF MUSIC FOR WELL-BEING

Music can be described as a language that most of us understand. It can shape cultures, foster connections and strengthen communities. And, as described in a recent report from the AARP's Global Council on Brain Health, music also provides a range of benefits for individuals.

Studies suggest music-related activities, which include dancing and singing, can promote well-being, reduce stress, regulate heart rate, enhance balance and may coordinate different brain regions. Music therapy has emerged as a powerful tool for improving quality of life by alleviating anxiety, depression and agitation. Music-related activities have also shown promise as an engaging activity for people living with dementia, given the ability to recognize familiar music may be preserved until advanced disease stages. For some individuals living with dementia, music can help reduce behaviors such as wandering, restlessness and aggression, and serve as a bridge to connect with care partners.



The Global Council on Brain Health's *Music on Our Minds* report included the following recommendations:

- Integrate music into daily routines, such as during exercise or when spending time with loved ones.
- Explore both new and familiar music. Learning new songs or a new instrument may stimulate the brain, while familiar favorites can release dopamine, a feel-good chemical.
- Use music to uplift mood during times of sadness or loneliness.

To read more about the role of music-related activities in promoting well-being, visit aarp.org/health/brain-health/global-council-on-brain-health/music.

TREATING HEARING LOSS CAN IMPACT COGNITIVE HEALTH

Untreated hearing loss, which is common among older adults, has been linked to an increased risk of cognitive decline and dementia. A recent clinical trial, led by Johns Hopkins researchers, tested whether providing hearing aids or other hearing assistive technologies to older adults with moderate-to-severe hearing loss would result in less cognitive decline over three years.

The ACHIEVE study was a randomized controlled trial that included participants from two groups: (1) healthy volunteers recruited from the community and (2) those already participating in an ongoing heart health study. Participants were randomly assigned to either a hearing intervention that involved providing hearing aids and audiology guidance to those with moderate-to-severe hearing loss; or a health education control group that involved working with a health educator to identify ways to improve health.

When data from the two participant groups were considered together, the hearing intervention and health education control groups did not differ from one another in rates of cognitive decline over three years. However, additional planned analyses demonstrated that the hearing intervention benefited the heart health study participants, who were older and had more vascular risks (e.g., high blood pressure, high cholesterol). These findings suggest hearing loss treatment may benefit cognition in at least some older adults.

ACHIEVE Study investigators are continuing to examine whether the hearing intervention benefits other factors, including brain structure and function, social isolation and quality of life.

To learn more about this study and keep up to date on new findings, visit achievestudy.org.



STAFF SPOTLIGHT



Marcela Blinka, Ph.D.

Research Associate, Geriatric Medicine; and Outreach, Recruitment and Engagement Core Co-leader, Johns Hopkins Alzheimer's Disease Research Center

Dr. Blinka's research focuses on understanding and improving different aspects of dementia care. She has a long-standing interest in community-based, minority-focused research projects that help address health disparities among underserved populations.

What do you enjoy most about your work?

I enjoy meeting individuals in the community with and without memory problems to learn how to better address their psychosocial needs.

What barriers to memory loss research and care are you trying to overcome in your work?

I aim to help develop novel ways to increase awareness about memory loss and aging. This includes overcoming barriers, including cultural and linguistic differences, so we can reach all members of the community with our programs.

CALENDAR OF EVENTS

Unforgettable Community Concert and Play

Concert: Oct. 4, 2024, 7 to 9 p.m.

Play: Oct. 5, 2024, 2 to 4 p.m.

Coppin State University
2500 W. North Ave., Baltimore, MD 21216

Info./Register: unforgettableplay.com

Walk to End Alzheimer's

Join our team – Johns Hopkins Aging and Alzheimer's Centers

Oct. 26, 2024

Hunt Valley Town Centre
118 Shawan Rd., Cockeysville, MD 21030

Info./Register: tinyurl.com/JHWalkTeam2024

Pythias A. & Virginia I. Jones African American Community Forum on Memory Loss

Nov. 9, 2024

8 a.m. to 2:30 p.m.

Morgan State University
1700 E. Cold Spring Lane, Baltimore, MD 21251

Info./Register: 800-272-3900

Journey to Hope Conference (hybrid)

Nov. 9, 2024

8:30 a.m. to 2 p.m.

Johns Hopkins Bayview campus or via Zoom

Info./Register: 410-550-7211 or anelso18@jhmi.edu

Community Forum on Healthy Aging (virtual)

Nov. 11 & 12, 2024

5 to 7 p.m.

Info./Register: cevans20@jhmi.edu

Holistic Health Seminar on Memory Loss (virtual)

June 7, 2025

9 a.m. to 12 p.m.

Info.: 410-550-2281

ADRC Conference on Aging and Dementia

June 10, 2025

9:30 a.m. to 2:30 p.m.

Owens Auditorium
Bunting-Blaustein Cancer Research Building
1550 Orleans St., Baltimore MD 21287

Info.: alzresearch.org/education-programs

Purple Weekend: Faith-based Alzheimer's Awareness

Faith communities help raise awareness about Alzheimer's disease and related dementias, and connect members with information about services and resources, by holding "Purple Weekend" events. These events are held during a religious gathering throughout the year and provide information about Alzheimer's disease and related disorders.

Info.: 800-272-3900 or mbmassey@alz.org

RESEARCH STUDIES SEEKING PARTICIPANTS



Help us learn more about healthy aging and the diagnosis and treatment of memory problems by participating in a research study. Each study has different eligibility requirements. Procedures, length of study and compensation vary.

- **Memory and Aging Study of the Johns Hopkins ADRC** – 410-550-3511
- **Magnetic Resonance Imaging (MRI) Studies in Cognitively Normal Individuals or Individuals with Mild Memory Problems** – 410-502-4797
- **Positron Emission Tomography (PET) Studies in Individuals with Mild Memory Problems** – gsmith95@jhmi.edu
- **Medication Trials in Individuals with Mild Memory Problems or Dementia** – 410-550-9022

For more information about research studies conducted by the Johns Hopkins Alzheimer's Disease Research Center, visit alzresearch.org.



The Johns Hopkins Alzheimer's Disease Research Center

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410-550-2281

Education Resources:

410-550-2204

Research Opportunities:

410-550-2281

Web: alzresearch.org

The Johns Hopkins Memory & Alzheimer's Treatment Center

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Clinic Info: 410-550-6337

Web: bit.ly/MemoryCenter

PATIENT AND FAMILY SUPPORT SERVICES

A variety of support services offer patients and caregivers opportunities to speak with others who have similar concerns and questions about coping with Alzheimer's disease or related disorders. These services also provide practical information and help members learn more about living with memory loss.

The programs below are free and open to the public and currently held **virtually**. Call or email for more information or to receive a Zoom link.

Hopkins ElderPlus Caregivers Support Group

Second Thursday of every month, 12:30 – 2 p.m.

Location: Ednor Apartment I at Stadium Place, 1040 E. 33rd St., Baltimore, MD

Info.: 410-550-8093

Frontotemporal Dementia Group (virtual)

Facilitated by Paula Notarangelo, RN-BC, MS, Alzheimer's Association

Second Wednesday of every month, 10:30 a.m – 12:30 p.m.

Fourth Wednesday of every month, 7 – 8:30 p.m.

Info.: 410-294-2409 or noto27@aol.com

Patient and Family Resources

Info.: bit.ly/patientfamilyresources

For more information about support groups in your area, visit alz.org/Maryland and click on "Help & Support."

Outreach coordinators are available to give presentations on topics related to memory loss and brain health, or host resource tables at community events. For more information, contact Claire Liu at 410-550-3511 or cliu224@jh.edu.