

# Healthy Brains Together

*The Community Newsletter of the Duke-UNC  
Alzheimer's Disease Research Center*

*Happy Holidays!*



## Duke-UNC Alzheimer's Disease Research Center (ADRC)

Our **mission** is to promote brain health awareness and to encourage participation in Alzheimer's disease research. We **aim** to connect with a diverse group of people across many communities so that they may be represented in future research findings. **In this Winter issue**, we spotlight a participant testimonial from the Memory and Aging study (page 2), introduce you to one of our team members (page 3), and give you holiday gift ideas for people with dementia and their caregivers (page 4).

## ADRC Participants Contribute to Gut Microbiota Study

The bacteria in our gut (known as microbiota) and the small molecules they produce (metabolites) play a crucial role in brain health and brain diseases. For instance, the loss of certain beneficial gut microbes has been linked to inflammatory processes that contribute to neurological disorders like depression, Parkinson's disease, and multiple sclerosis. Although it's known that the composition of the microbiota changes with aging, little is understood about how these changes may impact cognitive decline.

To address this gap, Dr. Niccolo Terrando and Dr. Paul Wischmeyer from Duke's Department of Anesthesiology collaborated with the Duke Memory Clinic/ADRC on a novel study aimed at unraveling the complex relationships between the gut microbiota, microbiota-mediated metabolites, age, and cognitive dysfunction. To do this, investigators collected stool samples from children, cognitively normal older adults, and older adults with Mild Cognitive Impairment (MCI). Partnering with Dr. Mara Serbanescu and Mary Cooter Wright from the Department of Anesthesiology, and with assistance from the Duke Microbiome Center and Metabolon, the researchers used advanced methods to study the connections between gut bacteria and various metabolites in the different groups of participants. Already the study has shown several intriguing findings. [Click here to read more](#)

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# Community Spotlight

## Connection is Key for Study Participant

A recent University of Michigan study estimates that about 2.5 million Americans are part of the “sandwich generation” who provide care to older family members while also raising children. Memory & Aging study participant Dara Williams is one of them. Her mother was diagnosed with Alzheimer’s disease at age 76. Now 81, she lives in a memory care facility where she is visited every day by her devoted husband. Dara has a full schedule as a wife, mother and daughter. She



*raising funds and awareness with her father*

manages their home including three children and two stepchildren, supports her father who lives with Dara and her husband, and assists with caregiving for her mother. Because individuals in multiple generations of her family have had Alzheimer’s disease, she worries about how this family history may affect her future health. Dara strives to live an intentional life that includes staying physically and mentally active and nurturing a sense of purpose through volunteer work in her community. She believes that connections with other people, especially those with similar experiences, are essential to her well-being. When asked about her participation in the study and how her experience could be improved, Dara suggested hosting an event for participants who wish to learn more about brain health and connect with each other. **A question for the reader:** Would you be interested in connecting with other Memory & Aging study participants?

Would you like to share your story and why you chose to join the Memory & Aging study? Let us know by sending an email to Rachel Dewees, Research Concierge. [rachel.dewees@duke.edu](mailto:rachel.dewees@duke.edu)

## Find Community Events



**Monday, January 29th, 2024, 2 p.m.**

**Medications & Dementia**

Speaker: Dr. Daniel Parker; Access his free webinar [via Zoom](#) or by phone by calling 1-646-876-9923; Meeting ID: 965-7747-1018; Password: 3513.

**[Check the ADRC calendar](#)** for other events of interest.



# Get to Know the *Memory & Aging Study*

## Meet Tiffany Kollah!

### Clinical research coordinator for the Duke-UNC ADRC



Tiffany holds a Bachelor of Science degree in Public Health from Slippery Rock University of Pennsylvania. Much of her work experience has involved brain health research, including several years at the Alzheimer's Disease Research Center (ADRC) at the University of Pittsburgh. At the U of Pitt ADRC, she worked on a study examining the relationship between Alzheimer's disease pathology and cognition, behavior and health using neuroimaging techniques. She also worked on a study that tracked chronic kidney disease in patients undergoing dialysis with the goal of reducing symptoms of pain, fatigue and

depression. Tiffany's research interests include statistical and longitudinal data analysis, the epidemiology of neurological and behavioral disorders and mental health disparities in minority populations. She enjoys helping others at the point where research and public health interventions meet.



## What Does Gait Speed Have to Do with Alzheimer's Disease?

If you are a participant in the Memory & Aging study, you know that your gait speed, or how fast you walk, is tested at study visits. Why do researchers want to measure this? Gait speed is often used as a measurement of physical ability in older adults and can help to predict future health. Furthermore, a study led by Duke researchers and published in *JAMA Network Open* in 2019 found that people in middle age with slower gait speed at age 45 showed signs of faster aging – in their brains and even in the appearance of their faces.

Another study of 17,000 older adults in the United States and Australia in 2022 showed that the decline of gait speed and cognitive decline together served as a better predictor of Alzheimer's disease later in life than either alone. While the relationship between gait speed and risk for Alzheimer's disease isn't completely understood, collecting this data from our cohort in the Memory & Aging study, will allow us to learn more about the connection over time.





# Gifts for People Living with Dementia and Their Caregivers

Barbara "Bobbi" Matchar, director of the Duke Dementia Family Support Program reached out to the experts – current and former caregivers from dementia caregiver support groups. Here are some of their ideas.

## GIFTS FOR PEOPLE LIVING WITH DEMENTIA

Several caregivers mentioned coloring books and jigsaw puzzles, both well-recognized for engaging people with dementia. Dominoes can be fun for people at any stage of dementia. Bev says that, as her husband's dementia progressed, they used dominoes as stacking blocks. "They were colorful and tactile and would hold his attention for a while," she says. "Ours were white and smooth and satisfying to hold and rub."

Mary's loved one enjoys Legos which can provide opportunities for cognitive stimulation, practice with motor skills, or simply an opportunity for a family activity.

Nancy, who cares for her husband with dementia, suggests this [Classy Pal](#) adult bib. She says, "this bib has really helped cut down on doing laundry." These [Designed to Dine](#) scarf bibs are a dignified option for women to stay clean and fashionable at mealtime.

Photo albums can be important tools for reminiscing and providing comfort for people with dementia. Kate's husband enjoys a digital photo album, and she appreciates the ease of swapping the photos wirelessly. [Click here for more ideas and staff picks.](#)

## GIFTS FOR CAREGIVERS

Caregivers were less forthcoming about gifts for themselves, but many agreed "me time" would be the best gift. Most caregivers appreciate having someone to spend time with their loved one so they can get a break to take a walk with a friend, enjoy a dinner alone with a spouse, or a weekend get-away. If you are not comfortable stepping in to help, but are able to pay for some hours of hired care, the caregiver in your life would certainly be grateful.

The experts shared that home-cooked meals dropped off and gift cards for take-out or dine-in were appreciated. Similarly, gift certificates for massages, pedicures, cleaning services or lawn care are attractive gifts for family caregivers.

Gift ideas for people with dementia and their family caregivers abound online.

[Click here to read a few of Bobbi's favorites.](#)



***The [Duke Dementia Family Support Program](#) offers education, support and engagement for people living with dementia and their families. Services are free of charge and no affiliation with Duke Health is needed to participate.***