

INSTITUTE FOR ENGAGED AGING

# Newsletter

Fall Prevention Edition | Issue No. 4 | Spring 2025



## IEA news

Exploring the impact, benefits and risks of new Alzheimer's disease treatments.

## Upcoming events

We look forward to seeing you at some of our events to learn about the IEA, research studies and healthy aging.

## Research spotlight

Get to know about fall prevention studies and classes. Improve your balance, reduce risks and stay independent.



Engaged is in our name. The Institute for Engaged Aging (IEA) is engaged in cutting edge research that has the power to transform the aging experience and quality of life. Classes taught by our faculty create dynamic learning environments for students. We also spend time in communities across the state, sharing our work in many forms. We are here to listen, too. We want to hear your needs and ideas to help us envision new directions for our community programming this year. Are you ready to join us? Have any ideas to share with us? I hope to see or hear from you soon.

Thank you so much for your continued support. We cannot do this important work without you.

— **Lesley Ross, Ph.D.**  
 Director of the Clemson  
 Institute for Engaged Aging



## Learn more about the IEA

### Who we are

*The Institute for Engaged Aging (IEA) discovers, develops and disseminates best practices for engaged aging across the lifespan through research, education and community outreach.*

The IEA empowers older adults to remain active and connected within their families and communities. We focus on finding and sharing the best ways to support and enrich the lives of older adults through research, education and community outreach.

The IEA collaborates with Clemson faculty and local organizations to address the diverse needs of older adults. Our goal is to ensure everyone can enjoy a fulfilling and engaged life, regardless of their social, economic or health situation.

With the aging population expected to nearly double by 2030, the IEA is dedicated to serving as a valuable resource for older adults and their communities in South Carolina.



Research - PACT study



Community outreach - health bingo



Education - "Avoiding Grandparent Scams" talk

# Physician's corner

## New Alzheimer's disease (AD) treatments

Alzheimer's disease (AD) is a progressive disease that causes brain nerve cell death. As cells die, connections in the brain are either lost or disrupted. In addition to nerve cell death, the hallmark of all neurodegenerative diseases, toxic proteins build up in the brain. Amyloid and tau proteins are key biomarkers of AD that clump together in plaques and tangles and contribute to inflammation and cell death.

Two anti-amyloid drugs are approved for treatment of AD. These drugs effectively remove amyloid from the brain and improve both cognition and function. Lecanemab and donanemab are monoclonal antibodies, which bind almost exclusively to amyloid. This allows the immune system to clear out the amyloid bound to these drugs. A modest improvement in cognition and function was demonstrated in large clinical trials, resulting in Food and Drug Administration (FDA) approvals. For example, the latest approval for donanemab involved 1,736 participants and demonstrated statistically significant amyloid clearance from the brain, along with meaningful decline in key cognitive and functional endpoints.

To receive treatment, individuals must have early stages of either mild cognitive impairment (MCI) due to AD, or mild AD, and be able to undergo Magnetic Resonance Imaging (MRI) scanning. To confirm these diagnoses, either a spinal fluid examination or amyloid PET scan is needed. The PET scan measures amyloid directly in the brain, and spinal fluid amyloid and tau protein biomarkers directly relate to brain amyloid. Assuming no other medical or brain disorders exclude someone from treatment, the next step is typically a genetic test for the ApoE4 gene, which relates to the most important risk of anti-amyloid treatment. Amyloid Related Imaging Abnormality (ARIA) is defined as either swelling or bleeding in the brain and is more likely to occur with treatment. To monitor ARIA side effects, several MRI scans are done to see if serious side effects are observed. Unfortunately, even with treatment, AD continues to progress. More research is needed to identify effective ways to stop Alzheimer's disease.

MCI due to AD and mild AD are increasingly treated with anti-amyloid therapies that have been recently approved by the FDA. There is improvement in cognition, behavior and function, but the disease progresses even with treatment. Important side effects like ARIA may occur, and close monitoring for these side effects is required. More research is needed to find more effective treatments for AD and other neurodegenerative diseases.

By John R. Absher, M.D.

South Carolina Alzheimer's Disease Research Center  
Clemson University School of Health Research



We would love to hear from you!

Help us shape future programming for Alzheimer's disease and related dementias support.

The Institute for Engaged Aging (IEA) is exploring new programs for older adults, as well as ways to better support individuals and families affected by Alzheimer's disease and related dementias.

Please take a moment to complete our survey and indicate your interest in participating in any of the programs listed. Your feedback will help us better serve you and our community.

Please scan the QR code below or visit the "We want to hear from you!" section on our website to complete the survey.

**YOUR FEEDBACK IS IMPORTANT TO US!**



**SCAN ME**

**How to scan a QR code?**

1. Open your camera app on your cellphone.
2. Point it at the QR code.
3. Tap the link that appears to get started.



Mobile Outreach Health Resource Fair at The Preserve in Greenville

## IEA & SC-ADRC outreach

### Discover healthy aging resources

Institute for Engaged Aging (IEA) and the South Carolina Alzheimer’s Disease Research Center (SC-ADRC) staff and faculty are dedicated to enhancing social engagement, increasing health knowledge and strengthening connections between older adults and the service providers in their community.

Engaging older adults is central to the IEA mission. We aim to build a strong community and encourage active participation. Through the different events and activities hosted by the IEA and SC-ADRC, you can:

- Learn about preventive care and how to maintain your health and well-being.
- Discover valuable information about the IEA and our events.
- Explore current research opportunities that could benefit your health.
- Ask questions and gain insights into healthy aging and staying active.

We look forward to connecting with you, sharing resources and providing information to enhance your quality of life. Join us on these engaging and informative upcoming events!



**Follow Us**  
**Clemson Institute for Engaged Aging**  
 Engage with us through Facebook. Keep posted about our upcoming events and news!

## Upcoming events

The Institute for Engaged Aging (IEA) also participates in other events across the state.

We look forward to sharing more about the IEA and ongoing research studies and answer questions about healthy aging at these events.

### Thursday, March 27, 2025

- MUSC Senior Expo
- 9:00 AM - 1:00 PM
- Charleston Convention Center
- 5001 Coliseum Dr, N Charleston, S.C.
- Free event

### Tuesday, April 15, 2025

- Dr. Ross presentation
- Osher Lifelong Learning Institute (OLLI) at Furman
- 3300 Poinsett Hwy, Greenville, S.C.
- Private event.

### Friday & Saturday, May 2-3, 2025

- Mobile Outreach Health & Resource Fair (MOHRF)
- 10:00 AM - 3:00 PM (Each day)
- Archer School Apartments
- 226 Nassau St, Charleston, S.C.

### Wednesday, May 14, 2025

- Mental Health Awareness Month Resource Event
- 10:00 AM - 12:00 PM
- Mt. Pleasant Community Center
- 710 S Fairfield Rd, Greenville, S.C.
- Event for adults in the Sterling Community Center area.

### Thursday, May 15, 2025

- The Lake 2025 Senior Living Expo
- 9:00 AM - 1:00 PM
- Shaver Recreation Complex
- 698 W South 4th St, Seneca, S.C.

Stay tuned for more details and be on the lookout for upcoming events.

# Help yourself while helping others

## We are looking for dedicated volunteers just like you!

There are many ways to be involved with the Institute for Engaged Aging (IEA), including joining one of our research studies. Your involvement in research is essential for advancing treatments and prevention for Alzheimer's disease, promoting healthy aging and improving the lives of older adults in South Carolina, including our friends, family and community. Please contact each study or program to learn more or sign up.



### Active Mind Study

**Location:** IEA - Seneca, S.C.  
**Site coordinator:** Eslie Aguilar  
**Email:** IEA@clermson.edu  
**Phone:** (864) 916-6220

**Objective:** This study will determine if computerized brain training exercises can improve everyday abilities and reduce the risk of dementia in persons at a higher risk.



### Focus Groups

**Location:** Upstate, S.C.  
**Coordinator:** Lena Simon  
**Email:** lgsimon@clermson.edu  
**Phone:** (864) 916-6220

**Objective:** The focus group will examine intergenerational communication and decision-making around memory loss in African American rural families and individuals in the Upstate.



### Human Movement Study

**Location:** IEA - Seneca, S.C.  
**Coordinator:** Reed Gurchiek  
**Email:** hhentni@clermson.edu  
**Phone:** (609) 320-3875

**Objective:** The Free-Living Human Movement Study measures human motion in everyday life to understand how physical and cognitive functioning are related in older adults.



### CHAP

**Location:** Jacksonville, Florida residents only  
**Coordinator:** Marsha Hampton  
**Email:** mhamp3@clermson.edu  
**Phone:** (864) 916-6207

**Objective:** The study identifies the mechanisms through which interpersonal conscientiousness promotes healthier cognitive aging and its role within close relationships in a sample of participants.



### BA-UMAP

**Location:** Nationwide (Online)  
**Coordinator:** Marsha Hampton  
**Email:** mhamp3@clermson.edu  
**Phone:** (864) 916-6207  
**Website:** secure.ba-umap.com

**Objective:** The Black American United Memory & Aging Project (BA-UMAP) examines how factors across multiple domains impact progressive cognitive decline in a longitudinal sample of middle-aged and older Black adults.



### Heirloom

**Location:** Clemson University Main Campus  
**Coordinator:** Will Stevens  
**Email:** decisionlab@clermson.edu  
**Phone:** (864) 610-5708

**Objective:** Heirloom, The Role of Personal Images on Stress and Well-Being, assesses how viewing images of one's personal past influences stress and overall well-being. Two 75-90 minute in-person sessions.



**Marieke Van Puymbroeck, Ph.D.**, is associate dean of the Graduate School and professor of recreational therapy at Clemson University. She directs the Balance Lab, focusing on improving balance and reducing fall risk in older adults. Her research uses yoga and evidence-based programs like A Matter of Balance to enhance health and well-being among older adults. Recently, she led a grant to implement A Matter of Balance for 600 older South Carolinians.



**Cheryl Dye, Ph.D.**, is a research professor at Clemson University and the founding director of the Institute for Engaged Aging. She specializes in older adult health, fall prevention and dementia care. Since 2022, she has led A Matter of Balance and created the Health Coaches for Hypertension Control program, training representatives from 18 states by January 2025. She also co-developed the Brain Health Club for individuals with early to mid-stage dementia, which won the Aging Innovations and Achievement Award in 2020.

# Preventing falls in older adults

## Improving balance and flexibility

The Institute for Engaged Aging (IEA) has made fall prevention a priority for many years. The IEA is fortunate to have Marieke Van Puymbroeck, Ph.D., and Cheryl Dye, Ph.D., as two of our champions, helping us learn more about fall prevention and its importance.

Rural older adults in the Southeast region consistently rank as having the highest mortality rates in the nation due to five leading causes of death, including unintentional injury due to falls. Greater fall risk is linked to structural barriers that rural older adults experience, including: limited access to qualified care providers, fewer community-based programs, greater distances and transportation barriers to health care and community programs and financial constraints.

Rural older adults are more likely to fall than those in urban areas (32.5% vs. 29.5%), and this rural/urban gap widened in 2018. Older South Carolinians are more likely to reside in a rural area compared to an urban area. Rural residents fare worse than urban residents in health risk factors, health outcomes and age-adjusted mortality.

According to Marieke Van Puymbroeck, Ph.D., in 2016, unintentional falls were the #1 cause of injury death and #1 cause of non-fatal injuries in adults over 65 years of age. The issue is exacerbated in South Carolina by the rapid growth of the older adult population. Adults over the age of 65 increased by almost 50% between 2000 and 2010, outpacing growth in the nation (10.7%) and the southern United States (19.7%). It is predicted

that this population will increase 56% between 2015 and 2030, and according to the South Carolina State Plan on Aging, 2017–2021, by 2030, 28% of South Carolinians will be over the age of 60 years.

Unfortunately, according to the South Carolina Vital Statistics, there were 511 deaths from falls in 2019 (an increase from 171 in 2009) for individuals older than 65. Thus, it is imperative that we address fall prevention among older adults in South Carolina.

A Matter of Balance (AMoB) are fall prevention classes offered in the IEA Balance Lab with Cheryl Dye, Ph.D., as instructor. AMoB is a cognitive restructuring program that challenges ideas around falls and gently encourages participants to create action plans to increase activity levels.

AMoB learning strategies include: group discussion, problem-solving, skill building, assertiveness training, gentle exercises, viewing videos and sharing practical solutions. Dye reminds us of the multidimensional outcomes of the program like viewing falls and fear of falling as controllable, establishing realistic goals for increasing physical activity and changing home environments to reduce fall risk factors.

## Why fall prevention matters

As we age, our balance, strength and flexibility decline, making falls more likely. Falls may cause serious injuries like broken bones or head trauma and lead to a loss of confidence and independence. However, falls are preventable with simple changes in the home and regular physical activity.

### Common causes and risk factors of falls

- **Home hazards**  
Clutter, cords, pets and throw rugs may create tripping hazards.
- **Lack of safety features**  
Absence of grab bars in bathrooms and railings on stairs increase fall risk.
- **Poor lighting**  
Dim lighting in hallways and rooms makes it harder to spot hazards.
- **Exercise decline**  
Loss of muscle strength, flexibility and balance contributes to falls.

### Exercises to improve balance and flexibility

Exercise plays a key role in preventing falls. Focus on strengthening front and sides of the upper thigh and increase flexibility in hip flexor and heel cords. Balance may be practiced by standing heel to toe or standing on one foot.

### Benefits of fall prevention classes

Fall prevention classes offer practical information, physical activity and social benefits. Participants learn to



identify fall risks and find solutions together in a supportive community that shares knowledge and experiences. “I really enjoy the people in my classes,” says Cheryl Dye, Ph.D. “They are great at helping each other identify fall risk factors and developing solutions together.”

### Long-term benefits

Making the environment safer is certainly important, but nothing substitutes for muscle strength, flexibility and balance. Staying active prevents falls, supports overall health and helps one continue to engage in enjoyable activities and to remain independent in their home.

Stay tuned for upcoming fall prevention classes! If you are interested in participating, please e-mail us at [IEA@clemsun.edu](mailto:IEA@clemsun.edu) with your request. We will contact you with more details as soon as the classes become available. Turn to following page for more information.



“I recommend taking the class because it is fun as well as informative and useful.”

- Barbara Shaver



“What I enjoyed most about the class is the practical solutions provided for preventing falls, as well as the increased awareness of their causes. I highly recommend taking the class to learn effective ways to reduce the chances of falling and improve overall safety”

- Ralph Spear

# New dates!

## Join our fall prevention classes

One of the most important steps you can take to stay safe and active is to reduce your risk of falls.

Join us! The IEA will offer FREE new classes in March 2025. The Fall Prevention classes feature the evidence-based A Matter of Balance (MOB) program to reduce the risk of falls. The program will include group discussions, exercise training, mutual problem-solving, role-play activities and homework assignments.



Enhance your safety and well-being. Register today!

**No cost, FREE classes!**

**When?**

March  
4, 6, 11, 13, 18, 20, 25 & 27  
(Every Tuesday and Thursday)

**At what time?**

From 1:30 to 3:30 PM

**Where?**

Clemson Balance Lab - IEA (5th floor)  
Oconee Memorial Hospital,  
Seneca, S.C.

Must register to attend, sign up today! To secure your spot, please e-mail us at [IEA@clermson.edu](mailto:IEA@clermson.edu).

# Your support matters

## Strengthening communities & advancing research

While IEA research is primarily funded through grants, the majority of our educational and outreach programs rely on generous gifts. To help us continue these programs and extend our efforts, we have multiple ways for you to give.

Your generosity makes a difference and the funds directly support the IEA and the communities we serve.



### TAX TIPS.

Your financial contribution can be documented as a charitable tax deduction.

**Online donations** can be made at: [clermson.edu/centers-institutes/aging](http://clermson.edu/centers-institutes/aging)

\*\*Please check that the designation field on the website lists: "Institute for Engaged Aging."

### Mail checks to:

Clemson University Foundation  
P.O. Box 1889  
Clemson, S.C.  
29633-1889

Be sure to include "Institute for Engaged Aging" in the memo line to designate your gift!

DONATE  
*today*



SCAN QR Code

All funds received stay in our local communities.

# Preventing falls at home

## Simple and effective safety measures



Learn more about reducing your risk of falling at [www.nia.nih.gov/falls-prevention](http://www.nia.nih.gov/falls-prevention).



Many falls happen at home, where we spend much of our time and tend to move around without thinking about our safety. According to the American Association of Retired Persons (AARP), 77% of people 50 years and older want to live in their current home for as long as possible. An incredible and free resource is the AARP HomeFit Guide available at <https://www.aarp.org/livable-communities/housing/info-2020/home-fit-guide/>.

Many houses and apartments were built without much consideration for design elements that would make the space more livable throughout life.

There are changes you can make to your home that will help prevent falls and better ensure your safety. Here are some room-by-room key ideas:

- Floors, stairways and hallways: Ensure there are handrails on both sides of any stairs, and

make sure they are secure. Add good lighting, especially at the top and bottom of stairs, and consider motion-activated lights. Avoid throw rugs and walking on wet floors.

- Bathrooms: Mount grab bars near toilets and inside/outside of tubs and showers. Use non-slip mats and a night light.
- Bedrooms: Place night lights and light switches near your bed. Keep a flashlight and phone nearby for emergencies.
- Kitchen: Store frequently used items where they are easy to reach. Clean up spills immediately and prepare food while seated to prevent loss balance.
- Outdoor spaces: Keep lawn, deck or porch areas clear of debris. Fix broken or uneven steps and add non-slip material to outdoor stairways.

- Other living areas: Keep electrical cords away from walkways and arrange furniture to avoid obstacles. Arrange your furniture and other objects so they are not in your way when you walk. Avoid standing on furniture to reach high places, instead use a reach stick or ask for help.

### Tools to get help

Consider an emergency response system, a mobile phone with emergency contacts or a smartwatch that detects falls.

### Home improvement resources

Many state and local governments have education and/or home modification programs to help older people prevent falls. Check with your local health department, search the Eldercare Locator or call 800-677-1116 to find your local Area Agency on Aging to see if there is a program near you.

# Banana-blueberry Muffin recipe

In this issue, we share a recipe for healthier banana blueberry muffins created by Adair Hoover at Clemson University Extension.



Recipe for 12 muffins

## INGREDIENTS

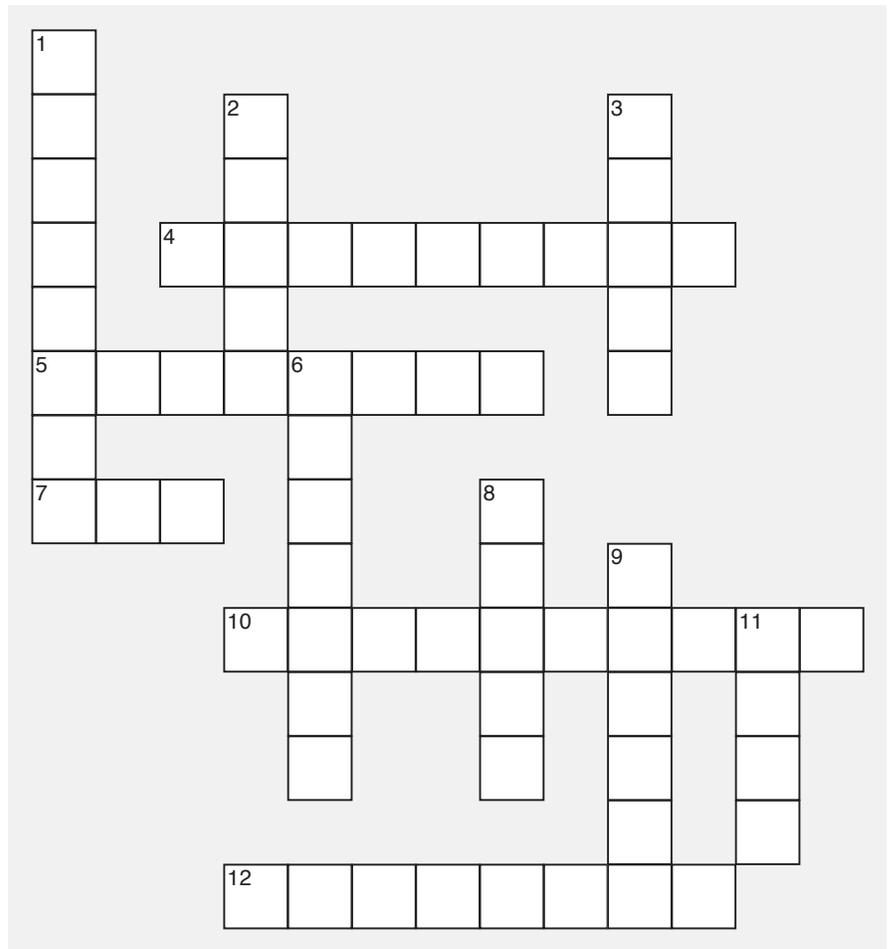
- 1 cup of all-purpose flour
- 1 tsp of baking powder
- 1 tsp of baking soda
- 1/4 tsp of ground cinnamon
- 1/4 tsp of salt
- 3 ripe bananas, mashed
- 1/2 cup of quick-cooking oats
- 1 tbsp of flax seed
- 1/4 cup of raw cane sugar
- 1 egg, lightly beaten
- 1 tsp of vanilla extract
- 1/4 cup of butter, melted
- 1 cup of blueberries

## DIRECTIONS

1. Preheat oven to 400 °F.
2. In a medium mixing bowl, gently combine dry ingredients: flour, baking powder, baking soda, cinnamon and salt. Set aside.
3. In a large mixing bowl, mash bananas and mix in oats, flaxseed, sugar, egg, vanilla and melted butter.
4. Very gently add dry ingredients to the banana mixture, do not overmix.
5. Fold in blueberries.
6. In a muffin pan, place paper muffin cups (or not) and lightly spray with non-stick cooking spray.
7. Scoop muffin mixture into each cup to about 3/4 full.
8. Cook 20 – 24 minutes or until a toothpick placed in the center of the muffin comes out clean.

# Keep your mind active

## Solve the crossword puzzle



### DOWN

- 1 Wearing a safe style can significant-ly reduce the risk of an injury
- 2 Should never be used as a step stool
- 3 Leading cause of injury for people over age of 25
- 6 Strengthens bones and muscles
- 8 Drink 6 to 8 glasses each day to prevent dehydration
- 9 Should be checked by a doctor each year
- 11 Make your \_\_\_ safer to prevent falls

### ACROSS

- 4 Stairway safety feature
- 5 One of the most important ways to reduce your chances of falling
- 7 A throw \_\_\_\_\_ can cause you to slip and fall
- 10 Should be installed along the path from bedroom to bathroom
- 12 A dosage change can make you drowsy or light headed

Want to check your answers? Turn to page 11 for the solution.

# WOULD YOU RATHER

We put together a few “would you rather” questions to get you thinking about how you move or would move around your home and what could help you stay safe! There is no right or wrong answer. It is just to keep you thinking safely while you make those decisions! Ready? Let’s see which options you would choose!

1. Would you rather wear indoor shoes or go barefoot at home?
2. Would you rather take yoga classes or chair exercises?
3. Would you rather use night lights or have a trusty flashlight?
4. Would you rather swap all your rugs for non-slip ones or go for carpeted floors?

In this edition, we asked some participants from the Fall Prevention Program what they would rather choose —take a look at what they picked!



**Barbara Shaver**

Age: Old

1. Indoor shoes | 2. Yoga | 3. Night lights | 4. Carpeted floors



**Nancy Maier**

Age: 67

1. Indoor shoes | 2. Chair exercises | 3. Night lights | 4. Neither



**Ralph Spear**

Age: 71

1. Barefoot | 2. Yoga | 3. Flashlight | 4. Neither

## Why I participate? We all have a reason!

We are thrilled that more people are joining our studies!



Your enthusiasm and participation are truly making a difference, and we are excited to see how the IEA continues to grow.

We are interested in hearing why you participate or would like to be involved in IEA research project.

Please e-mail us at [IEA@clemson.edu](mailto:IEA@clemson.edu) to share your “why.”

### Crossword puzzle answers:

- |              |                |
|--------------|----------------|
| 1. Footwear  | 7. Rug         |
| 2. Chair     | 8. Water       |
| 3. Falls     | 9. Vision      |
| 4. Handrails | 10. Nightlight |
| 5. Exercise  | 11. Home       |
| 6. Calcium   | 12. Medicine   |

## Join the PALS Network!

Partners and Advocates for Lifespan Science (PALS) Network connects individuals of all ages interested in participating in research at Clemson University!

To sign up, please call (864) 916-6220, e-mail [IEA@clemson.edu](mailto:IEA@clemson.edu) or complete the survey on our website.

*Please consider joining!*



SCAN QR Code

# IEA faculty & staff

## Welcome, Megan and Everett!

We are happy to introduce the newest members of the IEA team! Please join us in welcoming Megan Schumpert and Everett Mein. We are excited to have you on board and looking forward to the incredible contributions you will bring to our team and community.



**Megan Schumpert** is a research manager with Clemson's Institute for Engaged Aging. Megan received her B.S. in food science and human nutrition from Clemson University and later graduated summa cum laude from Arizona State University with a M.S. in healthcare innovation. As a certified medical lab scientist and former chemist, she joins us with a significant background in health care, laboratory science and quality management. She and her husband also own and operate a local tavern in downtown Clemson. In her free time, she enjoys traveling, gardening, audiobooks, distance running and spoiling her older dog, Mr. Goose.



**Everett Mein** is a third-year senior studying economics in the Wilbur O. and Ann Powers College of Business. He intends to pursue a career in finance or government upon his graduation from Clemson University this May. Everett is excited by the opportunity to work with the Institute for Engaged Aging, a project which he is passionate about in light of his late grandfather's experience with Alzheimer's. Everett was born and raised in Denver, Colorado. He enjoys skiing, golfing and traveling in his free time.

## Contact us for any additional information!

Have questions, feedback or just want to say hello? Our team is here and ready to assist you. Your input helps us grow and serve you better. Please reach out using the contact details below. We look forward to connecting with you!



(864) 916-6220



IEA@clemson.edu



**Oconee Memorial Hospital**  
298 Memorial Drive, Seneca, S.C., 29672

# Doll therapy

## Support OMH patients

Bring comfort and joy to Prisma Health Oconee Memorial Hospital (OMH) patients with Alzheimer's disease and/or related dementia (AD/ADRD).

The IEA is accepting donations for the OMH doll therapy drive.

Doll therapy can significantly reduce behavioral and psychological symptoms in patients living with AD/ADRD.

### How you can help:

- Donate new baby dolls or life-like toy dogs and cats.
- Drop-off location:  
Front desk of the IEA on the 5th floor of OMH.

Your donations will make a meaningful impact on the lives of those living with Alzheimer's. Thank you for your kindness and generosity!

