



SANDERS-BROWN CENTER ON AGING

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If you prefer to receive this newsletter via email or would like to be removed from our mailing list, email: paula.thomason@uky.edu or call 859.323.6040.

COMMUNITY OUTREACH



The Lexington Memory Café was created over two years ago to foster socialization and community interaction while combatting the isolation often experienced by families dealing with a memory loss diagnosis. Hosted by the Sanders-Brown Center on Aging, meetings are the second Monday of each month at the Living Arts and Science Center where participants are able to view a variety of beautiful art exhibits. Great effort is made to create a café-like atmosphere with a selection of food and music provided.

Attendance varies between six to twelve families as participants share personal experiences related to the theme for the month in a relaxed, supportive environment. Themes are selected based on holidays and the personal interests of participants. Through our discussions, we have traveled to Appalachia, Jamaica and throughout the US and Europe. We even took a real field trip to a state park for a picnic lunch.

To sign up or to learn more about the Memory Café, contact Deborah Danner at (859) 218-3867

CONTACT US

ASK DEBORAH

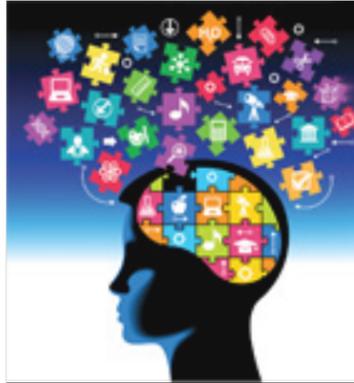
Deborah Danner, Education Core Leader, is always available to answer your questions. Please send your questions to dddann00@email.uky.edu

FEEDBACK

We welcome your feedback on: Questions or comments regarding the current issue;

Ideas for future newsletter content; or Corrections

Contact Paula Thomason: paula.thomason@uky.edu



BRAINSTORMS

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Our **mission** is to improve the health of the elderly through **research, education, outreach and clinical programs.**



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UNIVERSITY OF KENTUCKY

DIRECTOR'S CORNER



Linda Van Eldik, PhD, Director Sanders-Brown Center on Aging & Alzheimer's Disease Center

Exciting things are happening in the Sanders-Brown Center on Aging (SBCoA) related to our three-pronged mission of research, education/outreach, and clinical programs. This issue of "Brainstorms" highlights two examples of our cutting-edge research aimed at discovering early biomarkers or clinical indicators that might help identify people who are at risk of developing cognitive impairment and Alzheimer's disease. These studies are important both for early diagnosis and to identify individuals who might benefit from new Alzheimer's therapies as they are developed. In this regard, our SBCoA clinic has a large number of ongoing clinical research studies to test new potential interventions. We are seeking volunteers for many of these studies. This is a unique opportunity to contribute to ongoing research in the areas of Alzheimer's disease and normal aging. If you are interested in further information, please contact our SBCoA clinic at 859-323-5550.

Alzheimer's Could Be Third-Leading Cause of Death in U.S.

A new study done by researchers at Rush University in Chicago found that 500,000 people may have died from causes attributable to Alzheimer's, not the 84,000 previously reported by the Centers for Disease Control and Prevention. That's six times more deaths, which would make Alzheimer's the third-leading cause of death in this country, ranking this disease close to cancer.

Yet government funding for Alzheimer's research (\$504 million) is only a fraction of the funding for cancer research (\$5.3 billion). We are clearly facing a deeper and rapidly growing epidemic that calls for immediate action.

Alzheimer's is already a burden on caregivers and health care budgets. As more people live to advanced ages, it will become more of a burden. The rising toll makes it imperative to intensify research into ways to treat and prevent the disease. Only by working together will we be able to rise to meet this challenge head-on.

The research we do at SBCoA depends on both public and private funds to operate. Competitive grant funding supports the day to day operations of the SBCoA, but private donations help fund much of the research that we do. Private gifts also allow us to provide excellent community caregiver support, education and training. Please consider making a gift to the Sanders-Brown Center on Aging and help us change the lives of older people in Kentucky and nationwide. Your gift is more than money. It is a "gift of hope" not only for today but for all generations to come.

OUR RESEARCH

Sanders-Brown Research on Down Syndrome and Dementia

A multidisciplinary group of SBCoA scientists have identified an interesting connection between the health of the brain tissue that supports cognitive functioning and the presence of dementia in adults with Down syndrome. Published in the *Neurobiology of Aging*, the study, which focused on detecting changes in the white matter connections of the brain, offers tantalizing potential for the identification of biomarkers connected to the development of dementia, including Alzheimer's disease.

"We used magnetic resonance imaging (MRI) to compare the health of the brain's white matter and how strongly it connects different parts of the brain," explains Elizabeth Head, the study's senior author. "The results indicate a compelling progression of deterioration in the integrity of white matter in the brains of our study participants commensurate with their cognitive health."

Research team member David Powell compared the MRI brain scans of three groups of volunteers: persons with Down syndrome but no dementia, persons with Down syndrome and dementia, and a healthy control group. Brain scans of subjects with Down syndrome showed some compromise in the brain's white matter connections compared to those from the control group. When people with Down syndrome and dementia were compared to people with Down syndrome without dementia, those same white matter connections were even less healthy.



Perhaps the most intriguing aspect of the study was the correlation between the cognitive abilities of participants with Down Syndrome and the integrity of their white matter— those who had higher motor skill coordination and better learning and memory ability had healthier white matter connections.

Persons with Down syndrome are at an extremely high risk for developing Alzheimer's disease after the age of 40. The team hopes their work might eventually lead to the identification of biomarkers for the development of Alzheimer's disease in people with Down syndrome and, potentially, extend that to the general population as well.

Frederick Schmitt, a senior member of the team, was recently awarded the 2014 Mary Carter Award from Down Syndrome of Louisville. The award recognizes outstanding service and contributions that result in improved quality of life for people with Down syndrome. Receipt of this award further emphasizes the outstanding efforts by our motivated research team, and more importantly, the enthusiastic and dedicated participants and families who volunteer their time and energies.

We Are Pleased to Welcome Four New Faculty Members to the Sanders-Brown Team



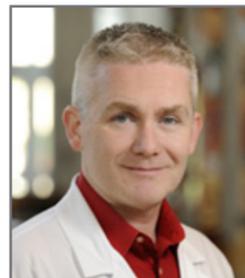
Erin Abner, PhD



Anika Hartz, PhD



Ai-Ling Lin, PhD



Ronan Murphy, MD

A Recent Study Suggests That Self-Reported Memory Complaints Might Predict Clinical Memory Impairment Later in Life

Erin Abner, an assistant professor at SBCoA and the UK Department of Epidemiology, asked 3,701 men aged 60 and higher a simple question: "Have you noticed any change in your memory since you last came in?"

That question led to some interesting results. "It seems that subjective memory complaint can be predictive of clinical memory impairment," Abner said. "Other epidemiologists have seen similar results, which is encouraging, since it means we might really be on to something."

The results are meaningful because it might help identify people who are at risk of developing Alzheimer's disease sooner. "If the memory and thinking lapses people notice themselves could be early markers of risk for Alzheimer's disease, we might eventually be able to intervene earlier in the aging process to postpone and/or reduce the effects of cognitive memory impairment."

Abner took pains to emphasize that her work shouldn't necessarily worry everyone who's ever forgotten where they left their keys. "I don't want to alarm people," she said. "It's important to distinguish between normal memory lapses and significant memory problems, which usually change over time and affect multiple aspects of daily life."

Data from the PREADVISE clinical trial study were presented at the 6th annual Clinical Trials on Alzheimer Disease Conference, San Diego, CA.

"If you think you have Alzheimer's, you might be right, study suggests."

ALZHEIMER'S DISEASE TOP 10 WARNING SIGNS

- 1. Memory loss that disrupts daily life** - It's normal to forget things occasionally and remember them later: things like appointments, colleagues' names or a friend's phone number. A person with Alzheimer's disease may forget things more often and not remember them later, especially things that have happened more recently.
- 2. Difficulty performing familiar tasks** - Busy people can be so distracted from time to time that they may leave the carrots on the stove and only remember to serve them at the end of a meal. A person with Alzheimer's may have trouble with tasks that have been familiar to them all their lives, such as preparing a meal.
- 3. Problems with language** - Everyone has trouble finding the right word sometimes, but a person with Alzheimer's may forget simple words or substitute words, making their sentences difficult to understand.
- 4. Disorientation of time and place** - It's normal to forget the day of the week or your destination -- for a moment. But a person with Alzheimer's can become lost on their own street, not knowing how they got there or how to get home.
- 5. Decreased or poor judgment** - People may sometimes put off going to a doctor if they have an infection, but eventually seek medical attention. A person with Alzheimer's disease may have decreased judgment, for example not recognizing a medical problem that needs attention or wearing heavy clothing on a hot day.
- 6. Problems with abstract thinking** - From time to time, people may have difficulty with tasks that require abstract thinking, such as balancing a check book. Someone with Alzheimer's may have significant difficulties with such tasks, for example not recognizing what the numbers in the check book mean.
- 7. Misplacing things** - Anyone can temporarily misplace a wallet or keys. A person with Alzheimer's disease may put things in inappropriate places: an iron in the freezer or a wristwatch in the sugar bowl.
- 8. Changes in mood and behavior** - Everyone becomes sad or moody from time to time. Someone with Alzheimer's disease can exhibit varied mood swings -- from calm to tears to anger -- for no apparent reason.
- 9. Changes in personality** - People's personalities can change somewhat with age. But a person with Alzheimer's can become confused, suspicious or withdrawn. Changes may also include apathy, fearfulness or acting out of character.
- 10. Loss of initiative** - It's normal to tire of housework, business activities or social obligations, but most people regain their initiative. A person with Alzheimer's may become very passive, and require cues and prompting to become involved.