

Photos in this issue highlight some of the campus and community activities that occur on Lake Mendota. (Photos by Jeff Miller/UW-Madison).



Wisconsin Alzheimer's
Disease Research Center
UNIVERSITY OF WISCONSIN
SCHOOL OF MEDICINE AND PUBLIC HEALTH

Headlines

SPRING 2018

UPCOMING EVENTS

Participant Appreciation Event & Reception

Save the date for our annual Participant Appreciation Event & Reception on August 16 at Union South on the UW-Madison campus. The evening will begin at 5:30 p.m. with light appetizers and refreshments. Several of our investigators and clinicians will offer presentations to update you on the scientific advancements occurring in the field of Alzheimer's disease, listen to your comments, and answer your questions. All participants in our Clinical Core Study and a guest are invited. Look for your invitation in the mail in early July for RSVP information and detailed parking instructions.



You Matter!

Date: August 16, 2018

Time: 5:30–7:30 p.m.

Location: Union South,
1308 West Dayton Street,
Madison

DIRECTOR'S MESSAGE

Ageing population underscores need for research into age-related disease

By 2035, people over the age of 65 will outnumber children for the first time in U.S. history. These changing demographics will have an enormous impact on the economy, health care, and every other corner of life in America. Our maturing population has underscored the importance of aging well and finding strategies to address age-related disease. Luckily, the federal government is listening, and responding.

In recent years, scientists have received historic levels of support from the National Institutes for Health (NIH) for research in Alzheimer's disease and related dementias. In 2017, funding reached \$1.4 billion. This spring, the National Institute on Aging (NIA) learned of a \$525 million increase in funding for Alzheimer's disease and aging. This has created momentum in achieving the research goal of the National Plan to Address Alzheimer's Disease — to prevent and effectively treat Alzheimer's disease by 2025. As a

30-year veteran researcher in this field, I have never before seen this level of support, optimism, and momentum for fighting this disease.

Just as this newsletter hits your mailbox, the Wisconsin ADRC will be submitting its 5-year grant application to continue funding as one of the nation's 32 NIA-designated Alzheimer's Disease Research Centers. This prestigious designation allows us to be part of a national network of scientists working to find preventive factors, treatments, and a cure for Alzheimer's disease. We will learn about the status of our application this fall, and I will write about it in a future newsletter.

NIH research is a public investment, generated in response to the greatest healthcare needs of Americans. Taxpayers fund this work. Many of you contribute to our science even further, by participating as research volunteers in our studies or through philanthropic dollars. Thank you for supporting our work. We could not do it without you.



Sanjay Asthana, MD
Associate Dean for Gerontology
Director, Wisconsin ADRC & Madison VA GRECC
Professor, UW School of Medicine and Public Health

NEWS BRIEFS

The NIH awarded **Amy Kind, MD, PhD**, a grant to study links between Alzheimer's disease and



Kind

neighborhood socioeconomic disadvantage. Using information from the Wisconsin ADRC, Wisconsin Registry for Alzheimer's Prevention (WRAP), and U.S. Census, Dr. Kind and her team will examine the impact poverty, education, and employment factors have on development of Alzheimer's disease.

Two Wisconsin ADRC trainees earned their doctorate degrees



Berman

this spring. **Sara Berman, PhD**, is working on her MD at the UW School of Medicine and Public Health, and **Andrew**



Merluzzi

Merluzzi, PhD, has accepted a position with the Potomac Institute for Policy Studies in Washington, D.C.

The Alzheimer's Association awarded **Megan Zuelsdorff, PhD**, a 2018 Research Fellowship



Zuelsdorff

Award, which will support her research on social stressors and disparities in cognitive aging over the next three years.

Memory screening day raises awareness for Alzheimer's disease in the African American community

Health disparities in Alzheimer's disease was the focus of the 2018 Solomon Carter Fuller Memory Screening Day, which was held February 16-17 in Madison, Wisconsin. Dr. Cerise Elliott, a program analyst at the National Institute on Aging and expert in health disparities research, was keynote speaker.

On February 16, Dr. Elliott met with student scientists from across campus to discuss initiatives at the

during African American History Month and celebrates Dr. Solomon Carter Fuller, a pioneer in Alzheimer's disease research and the first African American psychiatrist. The annual event is co-hosted by the Alzheimer's & Dementia Alliance of Wisconsin and supported by the Wisconsin Geriatric Education Consortium (WGEC).

A video of the Friday evening talk is on our YouTube channel at go.wisc.edu/adrcyoutube. ◊



Dr. Cerise Elliott was the featured speaker at the 2018 Solomon Carter Fuller Memory Screening Day.

National Institutes for Health (NIH), funding opportunities, and ways to grow their careers. In the evening, Dr. Elliott presented a free public lecture on caregiving at Fountain of Life Covenant Church on Madison's South Side.

The Alzheimer's disease education weekend continued on Saturday, February 17 at The Village on Park, with a caregiver workshop, a nutritional cooking demonstration featuring Chef Rod Ladson, and free, confidential memory screenings.

Solomon Carter Fuller Memory Screening Day is held each year



Top: Chef Rod Ladson, left, proprietor of Madison's Bonefish Grill, offered a healthy cooking demonstration. Bottom: Caregiver Q&A panelists Dr. Alex Gee, right, and Mrs. Jewelline Wiggins (left, with a photo of her late mother), shared stories with the audience about their experiences as caregivers to family members with Alzheimer's disease.

Photos by Heidi Rudd



RECENT EVENTS

Research day fosters collaboration and learning

The Wisconsin Alzheimer’s Disease Research Center hosted nearly 170 people at its 2018 Alzheimer’s Disease & Related Disorders Research Day at the Discovery Building on March 23, 2018. This annual event brings together faculty, students, and researchers from across the UW-Madison campus and is designed to encourage collaboration and promote scientific thought among scientists in the field of Alzheimer’s disease research.



Researchers mingle during the research day poster session at the Discovery Building.

John Denu, PhD, professor of bio-molecular chemistry at UW-Madison and epigenetics theme leader at Wisconsin Institute for Discovery, was the second invited speaker for the day. His talk emphasized that a person’s genetic makeup does not necessarily determine their health throughout the course of their life.

In addition, three student

researchers offered short presentations on their work.

Research Day is supported by the Wisconsin Geriatrics Education Consortium (WGEC). You can watch videos of the day’s lectures on our YouTube channel at go.wisc.edu/adrcyoutube. ♦

The keynote speaker for the event was Howard J. Federoff, MD, PhD, professor of neurology at the University of California, Irvine, and a groundbreaking investigator for neurological disorders. Dr. Federoff’s presentation focused on his research into a blood test for predicting Alzheimer’s disease risk.



Winners of the best abstracts competition at the 2018 Alzheimer’s Disease & Related Disorders Research Day. From left to right: Dr. Sanjay Asthana, Dr. Howard Federoff, Jeffrey Zemla, Samantha Allison, Justin McKetney, Jichao Sun, Andrew Merluzzi, Matthew Beilfuss, and Dr. Dorothy Farrar-Edwards.

Photos by Clint Thayer

STAY CONNECTED

Recent podcast episodes highlight early detection, caregiving

The “Dementia Matters” podcast is the Wisconsin ADRC’s most recent vehicle for disseminating information about Alzheimer’s disease research advancements to its research participants and the general public. Host Dr. Nathaniel Chin interviews experts in the community and academia on the latest Alzheimer’s disease headlines, research studies, and caregiver resources. A 10- to 15-minute episode is released every other week. Recent episode topics include:

- “A Look Inside a Brain with Alzheimer’s Disease”
- “The Potential for Predicting Alzheimer’s Disease Through a Blood Test”
- “What It Takes to Become a Dementia Friendly Hospital”

Listen to episodes through our website, www.adrc.wisc.edu/dementia-matters, or subscribe through iTunes, Google Play, Stitcher, Podbean, and other podcasting platforms.



SELECTED OPEN STUDIES

ADRC Registry (Clinical Core Study)

People who join this study undergo annual memory and thinking evaluations and participate in other ADRC-affiliated studies. Interested volunteers may join if they can attend a yearly visit with a study partner, either have MCI or are healthy, and are 45-65 years old, with or without a parental history of Alzheimer's disease.

EXERT

The EXERT study is investigating the effects of exercise on memory and thinking. Participants must be 65-89 years old with mild memory loss. They will join an exercise program at the YMCA facilities in Madison for 18 months, doing either stretching/balance/range of motion or aerobic exercise.

Diet and Exercise Trial to Improve Insulin Resistance, Increase Cerebral Blood Flow, Alter Metabolomic Biomarkers, and Decrease Alzheimer's Disease Risk (BFIT)

Prior research suggests that lack of exercise and poor diet may affect the brain. The purpose of this study is to examine changes in brain blood flow, cognition, and other health metrics related to a 12-week diet and exercise program designed to improve or reverse pre-diabetes. This study is actively recruiting ADRC Clinical Core members ages 45 to 65 and local to the Madison area.

BRAVE-EPA

The purpose of this study is to evaluate whether EPA, an omega-3 fatty acid, improves biomarkers of Alzheimer's disease and thinking abilities in middle-aged, cognitively healthy military veterans. We are looking for veterans aged 50-75 years old with normal memory who have a parent with Alzheimer's disease.

Connectome

The purpose of this study is to utilize MRI to make the most detailed measurements of brain networks to date in people with mild cognitive impairment (MCI) and Alzheimer's disease. We are currently recruiting people 55-90 years old who can undergo MRI.

ADRC Registry

New studies start frequently at the Wisconsin ADRC, and we're looking for male and female volunteers. The Wisconsin ADRC has created a research database – the Wisconsin ADRC Registry – to hold the names and eligibility information of potential volunteers. To join the Registry, you will be asked to complete a phone questionnaire.

If you are interested in volunteering, contact the ADRC at (608) 265-0407.

You can find a full list of recruiting studies on our website at www.adrc.wisc.edu/open-studies.

MEET A RESEARCHER

Dr. Heather Johnson

Heather Johnson, MD, is an associate professor in the Division of Cardiovascular Medicine at the UW School of Medicine and Public Health. Her research focus is in finding better ways to help patients control high blood pressure and other heart disease risk factors.



Johnson

Dr. Johnson is conducting a research project supported by the Wisconsin ADRC that explores

whether midlife cardiovascular risk factors, such as tobacco use, insulin resistance, hypertension, and obesity, increase the risk of Alzheimer's disease by altering blood flow to the brain. Since these risk factors are modifiable, they are potential targets for prevention and treatment of Alzheimer's disease. She and her colleagues will be evaluating the relationships between the risk factors. Additionally, they will be assessing whether these relationships vary across race, specifically between African Americans and Whites.



About Us

The Wisconsin Alzheimer's Disease Research Center (ADRC) combines academic, clinical, and research expertise from the University of Wisconsin School of Medicine and Public Health and the Geriatric Research, Education and Clinical Center (GRECC) of the William S. Middleton Memorial Veterans Hospital in Madison, Wisconsin. Founded in 2009, the ADRC receives funding from private, university, state, and national sources, including a National Institutes of Health/National Institute on Aging grant for Alzheimer's Research Centers (P50-AG033514).