

This issue features photos of ice cream produced at Babcock Hall on the UW-Madison campus. (Photos by Jeff Miller/ UW-Madison)



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

Headlines

SUMMER 2019

UPCOMING EVENTS

Annual Fall Lecture

Neil Henderson, PhD, an expert on diabetes and dementia among American Indian people, will be the keynote speaker at the Wisconsin ADRC Annual Fall Lecture, October 23, 2019, 5-8 p.m. at Gordon Dining and Event Center on the UW-Madison campus.



Henderson

Dr. Henderson is executive director of the Memory Keepers Medical Discovery Team on Health Disparities at the University of Minnesota Medical School, Duluth campus. He researches diabetes and dementia as an interactive syndrome, as well as community health interventions and education in the context of cultural diversity.

For more details, visit www.adrc.wisc.edu/events. ♦

DIRECTOR'S MESSAGE

Your continued participation in longitudinal research is appreciated and valuable

The Wisconsin Alzheimer's Disease Research Center (ADRC) passed its decade mark in April 2019. Some of you have been with the Wisconsin ADRC Clinical Core longitudinal study since the beginning, and many others have joined through the years. The study has reached nearly 1,000 enrollees, about 750 of which are still active participants who return regularly for follow-up visits.

This is a healthy size for our study. We will continue to recruit some new participants aged 45-65 with healthy memory and people with Mild Cognitive Impairment (MCI) and Alzheimer's disease, as well as people from groups traditionally underrepresented in research, particularly African Americans and American Indians. But much of our focus will turn from recruitment to retaining our current participants.

Your continued involvement in the Clinical Core study is very important. The longitudinal data we collect allows scientists to follow brain changes

over time and offers valuable insight into how lifestyle factors, genetics, and health affect Alzheimer's disease progression. In the last decade, longitudinal research has helped us realize the importance of biomarker studies, which include brain imaging and spinal fluid collection through lumbar puncture (LP). Biomarkers allow scientists to recognize the earliest Alzheimer's disease-related brain changes, giving them a look inside the brain we have never had before.

We are lucky to have a community of people who are willing to volunteer for research. I hope to personally thank you for your involvement at our Annual Participant Appreciation Event, which will be held in the evening on August 1, 2019, at the UW-Madison School of Nursing's Signe Skott Cooper Hall. You will receive a formal invitation in the mail in a couple of weeks. Please join me, along with center investigators and staff, in celebrating our collective success over the last decade. ♦



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

NEWS BRIEFS

Brain Health Brunch builds awareness of Alzheimer's disease in African American community

The National Institute on Aging (NIA) awarded **Barbara Bendlin, PhD**, a 5-year R01 grant for her first-in-the-field research into syn-



Bendlin

aptic change throughout the course of Alzheimer's disease. Dr. Bendlin will use positron emission tomography (PET) to follow synaptic loss and its relationship to memory changes.

Ozioma Okonkwo, PhD, an expert on exercise and brain health, received a new R01 grant from the NIA to conduct



Okonkwo

a longitudinal study to see if cardiorespiratory fitness in midlife has an effect on the presence of Alzheimer's disease-related brain changes and the development of clinical symptoms of the disease.

Lindsay Clark, PhD, received an R03 grant from the NIA for her study "Alzheimer's Disease Biomarker Disclosure in African Americans and Whites — Personal and Programmatic Consequences of Knowing ATN Status."



Clark

Results from this work will be used to develop and implement culturally-sensitive biomarker disclosure procedures.

About 200 people attended the Solomon Carter Fuller Brain Health Brunch on March 16, 2019, at the Wyndham Garden Hotel in Fitchburg, Wisconsin. The annual daylong event aims to build awareness of Alzheimer's disease in the African American community. Dr. Solomon Carter Fuller was the first African American psychiatrist and a pioneer in Alzheimer's disease research. He worked closely with Dr. Alois Alzheimer in Germany in the early 1900s and wrote some of the earliest and most comprehensive scientific papers published in English about dementia.

The Brain Health Brunch featured a health fair, caregiver strategies panel, healthy cooking demonstration, and performance by the "Amazing Grace" Chorus. Carl V. Hill, PhD, MPH, director of the National Institute on Aging's (NIA) Office of Special Populations, offered the keynote address "Double Jeopardy: The Curious Case of Health Disparities in the United States."

In his presentation, Dr. Hill discussed the importance of diverse perspectives and participants in research.

"A lack of diverse participation and perspective ... reduces our chances to understand how this devastating disease develops in all U.S. groups," Dr. Hill said.

Dr. Hill also emphasized that scientists and researchers need to uphold the declarations of inclusion they promised to support by developing and carrying through with plans for



Dr. Carl V. Hill offers the keynote address as the 2019 Brain Health Brunch.

enrolling women and racial and ethnic populations into the studies they lead.

"Given that black Americans ... are twice as likely to develop Alzheimer's, can research findings that omit this group ever truly be complete?" he asked. "How can you race for a cure when the people that are disproportionately affected aren't in the studies?"



The "Amazing Grace" Chorus is a musical group comprised of singers with dementia and their caregivers.

Watch Dr. Hill's talk online at www.go.wisc.edu/ADRCyoutube. The event was provided by the Wisconsin ADRC and the Alzheimer's & Dementia Alliance of Wisconsin, with sponsorship from the Wisconsin Geriatric Education Center. ♦



NEWS

Wisconsin ADRC featured in national clinical trials recruitment videos

Two research participants from the Wisconsin ADRC Clinical Core study, as well as center investigators, clinicians, and staff, were featured in a national clinical trials promotional campaign sponsored by the National Institute on Aging (NIA). The “Why I Participate in Alzheimer’s Research”



video series was filmed at the University of Wisconsin and Wake Forest University in North Carolina. The series profiles four research participants who discuss what motivates them to participate



in studies and how research staff support them. The videos are intended to be shared as part of engagement and recruitment efforts for clinical studies. The NIA produced both long and short versions of each participant’s story. You can find links to all the videos on our website by visiting www.go.wisc.edu/t593bs.

RECENT EVENTS

Research Day showcases Alzheimer’s disease research on UW-Madison campus

The Wisconsin ADRC hosted more than 160 attendees at its 2019 Alzheimer’s Disease & Related Disorders Research Day, which took place March 1 at the Discovery Building on the UW-Madison campus. This year’s program examined what population research tells us about Alzheimer’s disease risk and welcomed featured speakers Rachel Whitmer, PhD, professor of epidemiology and director of the Population Science of Brain Health Laboratory at the University of California, Davis, and Amy J. Kind, MD, PhD, associate professor of medicine and director of the Health Services and Care Research Program in the UW Department of Medicine.

More than 40 students, trainees, postdocs, fellows, and junior faculty members submitted scientific abstracts to the poster session held in



Poster presenters at the Research Day poster session.

conjunction with the event. You can read all of the submitted abstracts and watch presentations from the day on our website at www.adrc.wisc.edu/researchday2019. The event was sponsored by the Wisconsin Geriatric Education Center. ♦

REMINDER!



Wisconsin Brain Donor Program
Wisconsin Alzheimer’s Disease Research Center
UNIVERSITY OF WISCONSIN
SCHOOL OF MEDICINE AND PUBLIC HEALTH

All participants of the Wisconsin ADRC Clinical Core Study and their biologic parents are invited to join the Wisconsin Brain Donor Program.

For more information, to update your registration, or to become a future brain donor, please contact us.

Office phone: (608) 265-4000



NEW STUDY ANNOUNCEMENT

STRIDE study will examine the effects of chronic stress on brain health

Everyone experiences stress sometimes. Our bodies are well-adapted to handle an occasional stressful event: the hormonal cascade that results when we perceive an impending stressor sharpens our senses and gives us energy that ideally aids us in surmounting (or escaping!) the stressor. However, the short-term vascular and immune system changes that are responsible for this extra boost can become maladaptive for the body's systems and health when stress is chronic. A large body of research has shown that stressful experiences across the life course get "under the skin" to impact physical health and well-being during later life.

Emerging evidence now suggests that stress can also affect one's cognitive health and risk for developing Alzheimer's disease. However, much research is still needed to understand that relationship, including the physiological pathways in play. The important role that resources such as social networks, material assets, and personal coping styles can play in buffering stressors and fostering resilience must also be explored. Membership in a particular community, such as a rural community or a minority racial group, can be associated with unique strengths and stressors, and research

that includes these unique experiences will be crucial to making progress in this area.

Dr. Megan Zuelsdorff will be recruiting current ADRC participants into the Stress and Resilience in Dementia (STRIDE) study. STRIDE will explore the ways that life stress and coping tools can exaggerate or slow wear-and-tear on our body's systems, and impact memory and brain health as a result. Interested participants answer questions about both distant and more recent life events, and about their personal approach to coping with adversity. Participants will also collect saliva samples at home for two days following their regularly scheduled ADRC visit; these samples will provide information on the individual regulation of cortisol, an important stress hormone.

We are just beginning to understand how a lifetime of experiences can shape later-life cognition. Stressful experiences can negatively impact health, but they may also build strength and resilience. This one-time, non-invasive study will provide us with invaluable information regarding the role for stress, coping, and resilience in cognitive health and Alzheimer's disease. For more information, contact Dr. Zuelsdorff at (608) 262-5951.

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 (P30-AG534255). Visit us online at www.adrc.wisc.edu

STUDY NEWS

Recruit a friend

Our research needs volunteers like you. Recruit a friend or family member to volunteer with the Wisconsin ADRC. We are looking for volunteers with Alzheimer's disease or Mild Cognitive Impairment (MCI), as well as people age 45-65 with healthy memory.

What is MCI?

People with MCI have more memory problems than other people their age, but their symptoms are not as severe as those associated with Alzheimer's disease. MCI may progress to Alzheimer's disease, however, some patients regain normal memory and cognition. Signs of MCI include:

- Having more trouble coming up with words or names of familiar people than others of the same age
- Forgetting recent conversations, events, or appointments
- Losing things often

People interested in becoming a study participant with the Wisconsin ADRC should contact our recruitment coordinator at (608) 265-0407.

A full list of recruiting studies is on our website at adrc.wisc.edu/open-studies.

