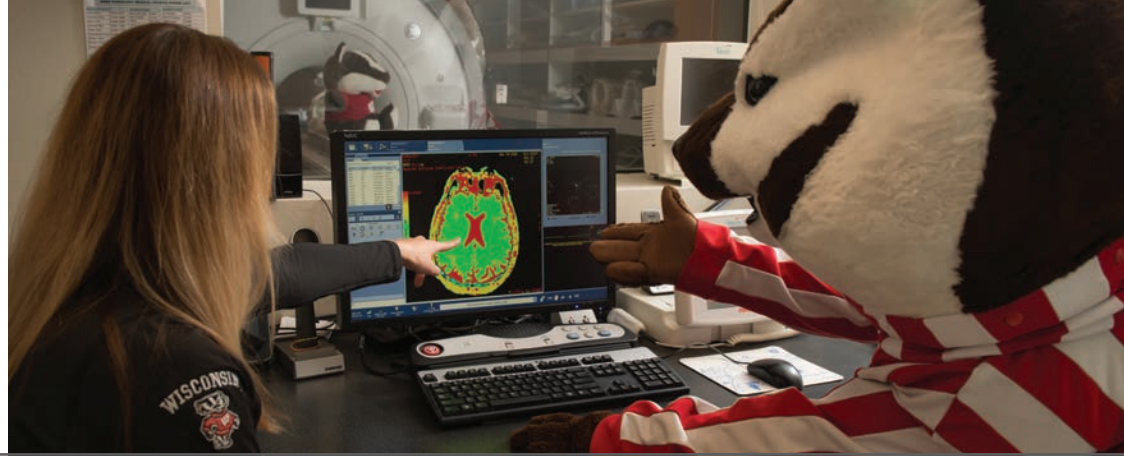


*Bucky Badger
reviews detailed
brain imaging
with the staff of the
Wisconsin ADRC.*



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

Headlines

SUMMER 2016



SAVE THE DATE

Annual Community Lecture, October 25

The Wisconsin ADRC welcomes keynote speaker Dr. Lindsay Farrer of Boston University to its Annual Community Lecture on October 25, 2016. Dr. Farrer will present a free educational talk on the genetics



Farrer

of Alzheimer's disease. Additional speakers from UW-Madison will share the latest Alzheimer's disease research as well as information on how to make the most of life if you have the disease or care for someone who does. The evening kicks off with a Resource Fair at 5 p.m., followed by speakers at 6 p.m. The event will take place at Monona Terrace Community and Convention Center, 1 John Nolen Drive, Madison, Wisconsin. No RSVP is necessary.

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DIRECTOR'S MESSAGE

Research breakthroughs lay groundwork for discovery of new treatments

In recent years, scientists at the Wisconsin Alzheimer's Disease Research Center (ADRC) have made innovative discoveries in the study of preclinical biomarkers that indicate a patient is entering the early stages of Alzheimer's disease. By studying detailed brain images, researchers have identified early brain changes that occur in Alzheimer's disease patients before they ever experience symptoms. This knowledge has allowed scientists to enter a new stage of discovery and turn their focus on developing new treatments and prevention strategies that will slow or stop the onset of the disease when patients have no symptoms. Among others, funded studies in our center are exploring how exercise and sleep affect healthy brain aging and preclinical biomarkers of Alzheimer's disease.

While biomarker research offers promising results for a cure, Wisconsin ADRC scientists are also looking at Alzheimer's disease on the molecular level. A recent discovery identified new pathways that lead to the development of Alzheimer's disease. By learning how the disease starts and progresses, scientists can develop drugs that change the disease's path. Just in the last few months, we have found new molecules that have the potential to stop the disease and even lead to a cure.

As part of its mission to improve the lives of all Alzheimer's disease patients and their families, the Wisconsin ADRC is working with a new focus on health disparity research, specifically in African American and Native American populations. Cur-

rently, very little is known about Alzheimer's disease in these two populations. That will change with new research on the horizon at the Wisconsin ADRC. The center has secured a new grant from the National Institutes of Health (NIH) that will allow it to expand its African American study cohort and significantly increase preclinical biomarker data in this population. The center is working to secure funding that will allow it to begin similar work with the Oneida Nation in east-central Wisconsin.

I am deeply proud of the accomplishments our center has made since 2009, when the Wisconsin ADRC was formally established. I am excited to report that just in the last few months we have learned we are likely to receive substantial new research funding. This money, along with the dedication of our volunteers and other supporters, will ensure our work toward improving the lives of people in Wisconsin and around the world will continue. Thank you for support. On, Wisconsin!



Sanjay Asthana, MD

Associate Dean for Gerontology
Director, Wisconsin ADRC and Madison VA GRECC
Head, UW Division of Geriatrics & Gerontology
Professor, UW School of Medicine and Public Health

NEWS BRIEFS

Ozioma Okonkwo, PhD, assistant professor of medicine at the University of Wisconsin School of Medicine and Public Health and co-leader of the Wisconsin ADRC Neuropsychology Service, is the recipient of the 2016 Early Career Award from the National Academy of Neuropsychology.



Okonkwo

Dorothy Farrar-Edwards, PhD, leader of the Wisconsin ADRC Outreach, Recruitment and Education Core and the Minority Recruitment Satellite Program, received a Vilas Distinguished Achievement Professorship in May 2016 in recognition of her research of health disparities in Alzheimer's disease and stroke and contributions to recruitment and retention of underrepresented groups (URGs) in biomedical research.



Farrar-Edwards

Amy Kind, MD, PhD, an investigator with the Wisconsin ADRC, has been invited to speak on Alzheimer's disease care and socioeconomic disparities at the National Alzheimer's Project Act Council, which coordinates federal agencies conducting Alzheimer's-related care, services, and research.



Kind

Sterling Johnson, PhD, Wisconsin ADRC associate director and leader of Neuroimaging, is primary investigator on "Molecular Atlas of Alzheimer's Disease Stages," a research project that aims for a better understanding of the metabolic pathways in Alzheimer's disease. This is one of 14 projects funded through UW2020: WARF Discovery Initiative, which supports research that has the potential to fundamentally change a field of study.



Johnson

RECENT EVENTS

Solomon Carter Fuller Memory Screening Day

The 6th Annual Solomon Carter Fuller Memory Screening Day was held February 19, 2016, at Fountain of Life Covenant Church in Madison, Wisconsin. Keynote speaker Dr. Consuelo Wilkins, executive director of the Vanderbilt-Meharry Alliance, addressed Alzheimer's disease and its effects in the African American community. The free community event also offered confidential memory screenings and an educational workshop for Alzheimer's disease patient caregivers.



Consuelo Wilkins, left, keynote speaker at the 2016 Solomon Carter Fuller Memory Screening Day with Wisconsin ADRC Director Sanjay Asthana.



Dr. Sterling Johnson describes new brain scan technology at the March 3 Mini Med School.

Photo by Todd Brown; UWSMPH Media Solutions

Mini Med School

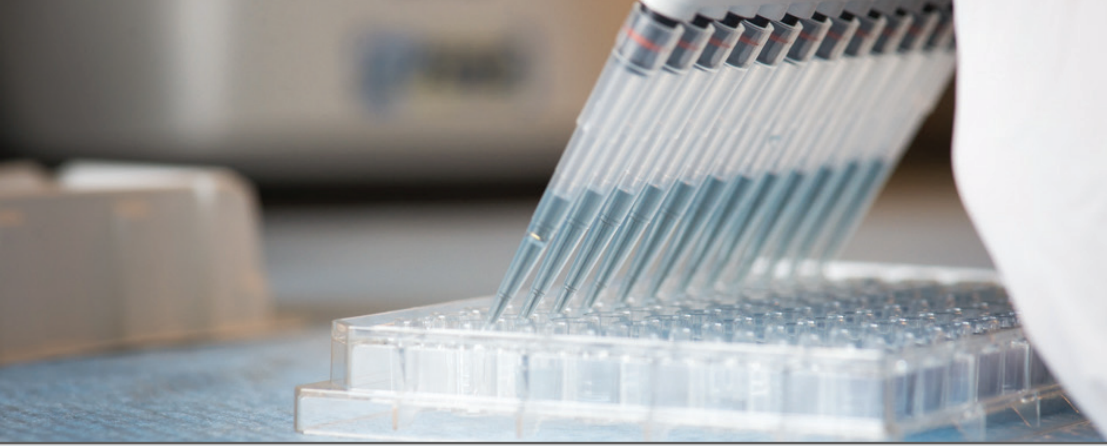
Alzheimer's disease was the subject of the March 3, 2016, Mini Med School, a public lecture series offered by the University of Wisconsin School of Medicine and Public Health. Nearly 500 people attended the event and listened to talks about progress in Alzheimer's disease research and outreach efforts at UW-Madison. You can view the entire lecture series online: www.med.wisc.edu/mini-med-school/36954.

Participant Appreciation Events

Each year, our summer participant appreciation events allow the faculty and staff at the Wisconsin ADRC to say thank you to the men and women who volunteer their time to participate in our research studies and cohorts. These volunteers are an essential part of our work, and we are deeply grateful for their dedication. On June 4, 2016, we held a thank you event at Fountain of Life Covenant Church in Madison for 25 participants and friends of the center who are in underrepresented groups and participate in AD research. On July 19, 2016, we held our 8th Annual Participant Event on the UW-Madison campus, with about 140 attendees.



The Wisconsin ADRC hosted 25 participants and friends of the center at its June appreciation event.



DEVELOPMENT UPDATE

UW-Madison: On a Quest to Cure Alzheimer's Disease

Every 66 seconds someone in the United States develops Alzheimer's disease. There are more than 5.3 million Americans living with the disease and over 15 million caregivers. It currently cannot be prevented, cured, or even slowed, but we are fighting to change that every day.

Here at UW-Madison, we are providing world-class care for those with Alzheimer's

disease and related dementias by conducting breakthrough research and spreading prevention strategies to communities across the state. However, we felt we needed to do more to address this international healthcare crisis. The University of Wisconsin School of Medicine and Public Health has identified Alzheimer's disease as a key priority and is adding resources in order to move the Alzheimer's disease program forward more quickly so we can figure out, fix, and at the very least delay the onset of Alzheimer's and the devastating effects that come with it.

Because federal grants are increasingly limited and are simply not enough to support the robust efforts of the program, philanthropic support is essential to

advance the mission of the Wisconsin ADRC — improving the lives of people affected by Alzheimer's disease by enabling innovative science that targets the prevention and treatment of the disease. In my new role as director of development for the UW-Madison Alzheimer's Disease Program, my primary responsibility is to work with individuals and organizations who are

**THERE ARE MORE THAN
5.3 MILLION AMERICANS
LIVING WITH THE DISEASE
AND OVER 15 MILLION
CAREGIVERS.**

interested in supporting these efforts.

To learn more about how you can make a difference in the lives of those living with Alzheimer's disease, please contact me at dori.suddarth@supportuw.org or (608) 381-3638. Or visit www.adrc.wisc.edu/donate. Will you help us discover the next breakthrough?



Dori Suddarth
Director of Development
UW-Madison Alzheimer's Disease Program

DIRECTOR'S NOTE

Dori Suddarth has been named director of development for the UW-Madison Alzheimer's Disease Program, a new overarching initiative that includes the Wisconsin ADRC and other campus organizations working on addressing the various aspects of this complex disease. Dori is an accomplished development professional who understands the importance of philanthropy to support the ongoing needs of the research, education, and outreach work being conducted here. She has an extensive fundraising background through her professional and volunteer experience and formerly was the director of development for the Department of Orthopedics and Rehabilitation. Please join me in welcoming Dori! — *Sanjay Asthana, MD*

ACTIVELY RECRUITING 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 and either have MCI or are healthy, 45 to 65 years old, and have no parents with Alzheimer's.

Microbiome in Alzheimer's Risk (MARS)

This study will examine how gut bacteria influence our health, in particular, cognitive health. Must be a member of the Clinical Core Study to join.

Predicting Alzheimer's from Metabolic Measures and Sleep (PAMMS)

PAMMS evaluates brain changes over time by examining metabolic measures and sleep to see how they affect the brain. Must be a member of the Clinical Core Study to join.

Audiology Research Study

We are enrolling participants with normal memory into this study that looks at why it becomes difficult to understand speech in noisy situations as you age. Volunteers will undergo various hearing tests and fill out a questionnaire.

EXERT

Exercise programs may improve memory and thinking abilities for adults. The purpose of EXERT is to examine the effects of stretching, balance, and range of motion exercise versus moderate- to high-intensity aerobic exercise on memory and thinking skills in older adults with mild memory loss.

CHESS-D

We are looking for caregivers of people with memory loss to participate in this study looking at the feasibility and effectiveness of a new web-based tool created to help caregivers in day-to-day caregiving. There is no cost to volunteers. A computer, Internet connection, or computer experience are unnecessary.

TREATMENT TRIALS

Clinical Trial for Those with MCI Due to AD (APECS):

This clinical trial examines the effects of an investigational drug to reduce amyloid plaque formation and modify the disease progression.

Solanezumab Clinical Trial for Those with Preclinical Memory Complaints (A4):

This clinical trial examines the effects of Solanezumab in patients with preclinical memory complaints, but who have not been diagnosed with AD dementia.

If you are interested in volunteering, contact Carol Hutchison at (608) 265-0407 or cshutch@medicine.wisc.edu.

WISCONSIN ADRC IN NUMBERS

The Wisconsin Alzheimer's Disease Research Center studies the causes, diagnosis, treatment, and prevention of Alzheimer's disease, as well as related topics such as caregiver stress and models of patient care. The following is a summary of who we are and what we have accomplished since the center was formally established in April 2009.



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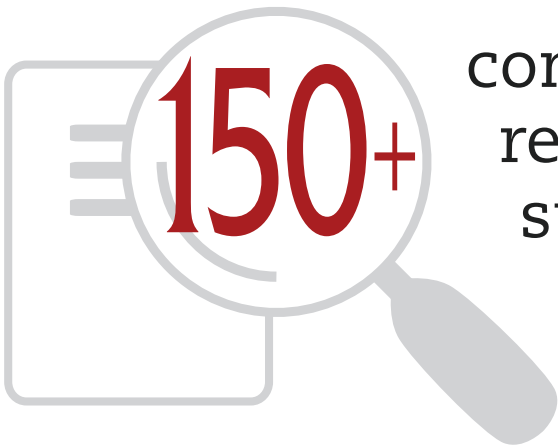
SCIENTISTS

50+

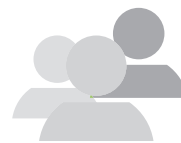
ACTIVE RESEARCH
STUDIES IN BASIC
SCIENCE AND
CLINICAL RESEARCH

489

RESEARCH
PAPERS
PUBLISHED



completed
research
studies



720
participants in
Clinical Core
19%
from under-
represented
groups (URGs)



92

community
outreach and
educational
events in
2015

557

participants received
Magnetic Resonance
Imaging (MRI) scans

386

participants received
Lumbar Punctures
(LPs)

360

participants received
combined
MRI and LP

ninety million dollars
IN TOTAL FUNDING



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

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