DIRECTOR’S MESSAGE

Biomarkers: Wisconsin leads in new frontier in Alzheimer’s disease research

The National Alzheimer’s Project Act (NAPA) was signed into law in 2011, with the overarching vision of eliminating the burden of Alzheimer’s disease and related dementias for people in the United States. The plan set goals for success and attached a time frame — prevent and effectively treat Alzheimer’s disease by 2025. We are halfway through this 14-year challenge, and the research community has made considerable progress.

We now know brain changes associated with Alzheimer’s disease start decades before the clinical symptoms are apparent. Scientists have identified more than 25 genes involved in Alzheimer’s disease. And we learned diet, exercise, heart health, stress, and other modifiable risk factors can affect brain health and possibly delay cognitive decline.

Our center is on the leading edge of much of this research, and a high score on our recent renewal grant application indicates the National Institutes of Health will likely continue funding our center for another 5 years. I am extremely excited about what continued funding will mean. It will allow us to introduce new training opportunities for the next generation of researchers, launch a unique health care research program aimed at enhancing patient care, and expand our understanding of biomarkers, or early indicators, of Alzheimer’s disease. Biomarkers are the new frontier in Alzheimer’s disease research, and our center is uniquely poised to gain a greater understanding of the early stages of this disease through our growing archive of brain images and cerebrospinal fluid samples. You will hear more about our efforts to expand biomarker collection at your upcoming annual visits and summer appreciation events.

With your help, I believe the research community will achieve NAPA’s goal to prevent and effectively treat Alzheimer’s disease by 2025. Thank you for participating in research studies and making your philanthropic contributions — we couldn’t reach our goals without you!

Sanjay Asthana, MD
Associate Dean for Gerontology
Director, Wisconsin ADRC & Madison VA GRECC
Professor, UW School of Medicine and Public Health
‘Healthy Living with MCI’ series offers support and education for patients and caregivers

The Wisconsin ADRC, together with the Alzheimer’s Association South Central Wisconsin Chapter, launched a new support and education series for people diagnosed with mild cognitive impairment (MCI) and their families and caregivers.

“Healthy Living with MCI” is a quarterly series held in Madison, Wisconsin, designed to provide research-based strategies for brain health and resources for people living with MCI.

At the November 17, 2018, meeting of “Healthy Living with MCI,” Dr. Barbara Bendlin discussed the role of diet in maintaining and improving brain health. She reviewed portion control, food journals, and the MIND diet for healthy brain aging.

The next meeting of “Healthy Living with MCI” will be March 30. The event will explore the role of exercise in improving brain health and reducing Alzheimer’s disease risk.

The series is free and open to the public, but registration is required. For questions or to register for the March session, please contact Outreach and Recruitment Specialist Hector Salazar at (608) 265-0407 or hsalazar@medicine.wisc.edu.

UW-Tribal partnerships bring Alzheimer’s disease education to Native American communities

In 2016, the Wisconsin ADRC and Oneida Nation forged a partnership to bring Alzheimer’s disease education to tribal communities. Three years later, the groups have hosted three joint memory screenings and dementia education programs in and around Oneida, Wisconsin. This partnership has provided valuable resources to the tribal community, as well as increased diversity in Alzheimer’s disease research — at the end of 2018, there were 54 Native Americans enrolled in the Wisconsin ADRC Clinical Core Study.

This spring the partnership will expand, reaching additional tribal communities in Wisconsin with the help of the Great Lakes Native American Elder Association (GLNAEA). Memory screenings and education events will be held with the Lac Du Flambeau Band of Lake Superior Chippewa Indians on March 6-7, and the Lac Courte Oreilles Band of Lake Superior Chippewa Indians on June 5-6.

The events are free and open to the public. For more information, visit www.adrc.wisc.edu/events.
RECENT EVENTS

Scientist studies SuperAgers to understand how they defy age-related memory changes

More than 400 people attended the 2018 Wisconsin ADRC Fall Lecture on October 1 at Gordon Dining and Event Center on the UW-Madison campus. The event started with a healthy aging resource fair, followed by a line-up of speakers focused on brain health.

In her talk, Dr. Rogalski shared that memory peaks in a person’s 30s and 40s, with average declines occurring with each subsequent decade. SuperAgers, however, retain exceptional memory skills throughout their lives. These are the people she studies. Dr. Rogalski’s research defines a SuperAger as a person over the age of 80 who has the memory skills of someone in their 50s or 60s. Her research team has screened more than 1,500 people to find the 85 SuperAgers who are currently enrolled in her research study.

Dr. Rogalski found SuperAgers’ brains shrink at a slower rate than the average person, have four times more von Economo neurons than other people their age, and report more positive relationships with friends and family. In addition, she shared a few lifestyle facts about SuperAgers. For instance, more than 80 percent currently exercise, and 15 percent are still working. To illustrate that SuperAgers haven’t always maintained the healthiest of habits throughout their lives, she shared that more than 70 percent reported past tobacco use, and 80 percent currently drink alcohol. Read more about SuperAgers at www.brain.northwestern.edu.

The Fall Lecture was supported by the Wisconsin Geriatrics Education Consortium (WGEC). Watch videos of event lectures on our YouTube channel at www.go.wisc.edu/adrcyoutube.

Emily Rogalski, PhD, an aging and dementia researcher at Northwestern University and associate director of the Mesulam Cognitive Neurology and Alzheimer’s Disease Center, offered the keynote address, “Optimizing Healthspan: Lessons from the Northwestern SuperAging Research Program.”

While much of today’s research into Alzheimer’s disease focuses on understanding why people develop dementia, Dr. Rogalski’s research takes a different approach by studying people with exceptionally healthy memories and trying to understand what makes them different.
NEW STUDY ANNOUNCEMENT

Neighborhoods and Alzheimer’s Disease Study expands new Neighborhood Disadvantage Tool into Alzheimer’s disease research

Where you live can affect your health. Living in neighborhoods with fewer resources has been linked to higher rates of diabetes, cardiovascular disease, and other diseases, as well as earlier death. At UW-Madison, Dr. Amy Kind has developed a map (also available as an interactive tool at www.neighborhoodatlas.medicine.wisc.edu/) to visualize neighborhood disadvantage. The tool uses measures of an area’s unemployment, poverty, education, and housing to rank neighborhoods from the least disadvantaged percentile to the most disadvantaged percentile.

Does living in a neighborhood with lower resources affect your likelihood of developing Alzheimer’s disease? This is what Dr. Kind and her collaborator Dr. Barbara Bendlin hope to learn from a new study: The Neighborhoods and Alzheimer’s Disease Study. The purpose of this research study is to find out if where people have lived over the course of their lives influences how likely they are to develop Alzheimer’s disease.

Participants who take part in the study will fill out a questionnaire about the places they have lived since birth.

People who are members of the ADRC Clinical Core study who do not have a current diagnosis of mild cognitive impairment (MCI) or Alzheimer’s disease will receive informational materials and a questionnaire via mail. If you would like to learn more about the study, please contact Leigha Vilen at (608) 262-2676.

SELECTED OPEN STUDY

Brain imaging study seeks volunteers with memory problems

Are you experiencing memory or thinking skills problems? If so, you may be eligible for a study at the UW School of Medicine and Public Health. The Alzheimer’s Disease Connectome Project will create detailed measurements of brain networks in people with mild cognitive impairment (MCI) and Alzheimer’s disease. The study is open to men and women between 55-90 years of age who have MCI or Alzheimer’s disease or concerns about their memory. The study requires up to four visits over four years, MRI brain scans, a medical history interview, blood draw, and cognitive, physical, and neurological exams. Participants can receive up to $650 for participating. If you are interested in learning more, call Mary-Elizabeth at (608) 262-7399.

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

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).