Spring 2016 WRAP Info Sessions Begin in April at Neenah

Many participants in WRAP have questions about the results of the research and plans for the future. Because of this, we invite you to attend an informational meeting that will report the results of our analyses and answer any questions you may have. The sessions are not open to the public, only to WRAP participants and their guests.

Please save the date for a WRAP Information Session near you. A formal invitation will follow in the mail soon.

- Tuesday April 19, 7:00-8:30 pm
  Holiday Inn Riverwalk, Neenah
- Tuesday April 26, 7:00-8:30 pm
  Holiday Inn West, Madison
- Saturday May 7, 9:00-10:30 am
  Crowne Plaza, Madison
- Tuesday May 10, 7:00-8:30 pm
  Stoney Creek Inn, Onalaska
- Saturday May 14, 9:00-10:30 am
  Rapkin Auditorium, Aurora Sinai Medical Center, Milwaukee

WRAP participants often ask about other studies for which they can volunteer. Several researchers will be present at these sessions to discuss recruiting WRAP participants to other studies.

Among the studies represented are:
- Fitness, Aging and the Brain (FAB)
- Microbiome in Alzheimer’s Risk Study (MARS)
- Generations OF WRAP (GROW)
- Surgical Trajectories: Alzheimer’s Association Records Study (STAAR)

Thanks to You, Research Going Forward

By Sterling Johnson, Ph.D., Principal Investigator
Wisconsin Registry for Alzheimer’s Prevention Study

WRAP, one of the premier U.S. studies focused on early markers of Alzheimer’s Disease (AD), is going strong. You, our participant-partners, who volunteer about every two years for a day of assessments and lab tests, deserve primary credit. About 85% of WRAP enrollees remain active. 769 have already completed at least four rounds of testing (about 10 years of follow-up). Round 6 begins later this year! Many also participate in research such as imaging or other biomarker studies, or exercise studies. 543 have volunteered for at least one related study. Our mission, early detection and prompt intervention, is more urgent than ever. Over 115,000 Wisconsin residents have AD right now; throughout the country and the world the numbers and costs are increasing.

Your help leads to discoveries that may change this state of affairs. We published a number of reports in scientific journals in recent years explaining what we have learned from you. We will summarize current findings at information sessions this spring. I hope to see many of you at one of these sessions; your invitation will arrive in the mail. You may read the full details of many of our papers at www.ncbi.nlm.nih.gov/pmc (enter the terms “WRAP and Alzheimer and Wisconsin” in the search bar). We have found physical and cognitive activity, sleep quality, and labs such as insulin and glucose levels are all related to better brain health, including lower levels of the amyloid plaques thought to cause AD. Our understanding of the genomics and metabolomics of AD is progressing, and we remain partners with the university’s world class brain imaging facilities to study plaques and tangles, the hallmarks of AD (see next page).

Although AD is WRAP’s main concern, other age-related health problems may affect memory and thinking. As the WRAP cohort ages (average age is 62), medical issues like diabetes, high blood pressure, and surgeries occur more often. New to the WRAP protocol is a medical evaluation to increase our understanding of what conditions you may face. The new evaluation will help us know how to correctly interpret memory loss if observed at your testing. The medical evaluations have begun in Madison and Milwaukee; we are working on the La Crosse site. This important addition has resulted in overwhelmingly positive feedback from participants. In some cases we were able to identify previously unknown health issues and make recommendations (see article below).

Participants Welcome Medical Exam at Study Visit

School of Nursing professors, started the exams last July. Milwaukee Nurse Practitioner Anita Steliga, who works in Aurora-Sinai’s Center for Senior Health and Longevity and Internal Medicine Clinics, conducted the first exam there in late January. La Crosse WRAP site exams may begin later in 2016.

“The exam fits into the larger picture of AD for two reasons,” explains Professor Bratzke. “First, it is important for us to recognize that there are other factors that may cause changes in cognition and the exams are a great way to rule out other causes of the cognitive changes. Second, we do not know what some of the early physiological signs of AD may be (prior to changes in memory); through the exams we may be able to find subtle physical changes that

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Medical Exams (from page 1)
precede the early cognitive changes or signal a looming cognitive decline.”

During the WRAP exams, Professors King and Bratzke have discovered undocumented heart murmurs, counseled participants regarding medications that are typically not prescribed together, and advised participants on ways to improve balance and muscle strength as they age.

“I think it is empowering for the participants to be able to discuss and better understand their health,” Professor Bratzke says.

Minority Recruitment Challenge: You Can Help

By Nia Norris, Research Specialist and Milwaukee WRAP Study Coordinator

In 2010 the national census showed that 20 percent of the United States population ages sixty-five and older was a racial or ethnic minority. By 2050, 42 percent of the nation’s older adults will be members of minority groups. We know that older African Americans are twice as likely to get Alzheimer’s disease (AD) and Latinos are about one and a half times more likely to get AD than whites. These numbers show the importance of including diverse groups in research. In response, the Wisconsin Alzheimer’s Institute (WAI) is proactively developing research, educational and clinical programs for minority communities.

WAI-Milwaukee opened in 2006, and has increased enrollment of African Americans in WRAP from 7 to 122; however, participation needs to grow to make research relevant to diverse populations now and in the future. Also, research shows communities of color are under-diagnosed and under-represented in health initiatives studying Alzheimer’s.

Verbal Fluency Tests Yield New Research Results

Language is often thought to be spared until later in the course of Alzheimer’s disease; however, a WRAP researcher’s recent paper published in *Archives of Clinical Neuropsychology*, shows that there may be subtle differences in language earlier.

There are some people in the WRAP study we think are experiencing very subtle cognitive changes, said principal author Kimberly Diggle Mueller, who has worked with WRAP participants nine years. “This means that, while they continue to function normally, and many if not most of their test scores are still within the normal range for the general population, they are showing some memory declines—relative to themselves—over time that is more than would be expected for normal aging. Therefore they are showing subtle declines that are not considered to be clinically impaired, so, very early. This analysis found that even at this very early, non-clinical stage of memory decline, we detected differences in language between those individuals with memory impairment and those who are not showing decline (we called them ‘cognitively healthy’).”

Ms. Mueller, who is working on her doctoral degree, said: “One of the bigger challenges in Alzheimer’s disease is communication breakdown between the person with the