6 Things We Know about RESILIENCE in Alzheimer’s Disease
How to Build a Stronger Brain, Mind, and Spirit at any Stage of Life

In this Issue

• Fish Oil and Seafood for Brain Health: What’s the Evidence?

• Co-Participants: The Unsung Heroes of ADRC Research Studies

• Updates on the WA State Dementia Action Collaborative and Federal Research Funding

• Grand Prize in National Dementia-Friendly Photo Contest
Hello readers!

The UW ADRC and its associated clinical and educational programming at the UW Memory and Brain Wellness Center are as busy as Seattle’s cherry blossoms, and we are pleased to bring you Dimensions for Spring 2018!

In these pages we hope you will gain, first, a wider perspective on resilience of brain, mind, and spirit in the face of dementia, a sense of what it takes to run the ADRC longitudinal study, and a dose of advice on taking fish oil for brain health. There’s also big news about state and federal funding. Most importantly, we hope you hear a positive message about Alzheimer’s disease: persons living with memory loss and dementia have much to offer, strengths to work from, and a perspective that can help us be a more effective Center.

We continue to be grateful for your interest and support of our work. The Ellison Foundation, the Richard M. and Maude Ferry Charitable Foundation, a gift of the Paul V. Martinis estate, the Sky Valley Whirlwinds, and other generous groups, make it possible for us to move faster and reach out further than ever before. We’re all in with you. With your help, we can prevail against this disease. Happy reading!

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DIMENSIONS
The University of Washington Alzheimer’s Disease Research Center (UW ADRC) is affiliated with the UW Medicine Memory and Brain Wellness Center (MBWC) and the Veterans Affairs Puget Sound Health Care System (VA). The UW ADRC has been funded by the National Institute on Aging since 1985 to facilitate cutting-edge research on Alzheimer’s disease and other neurodegenerative conditions that cause dementia. The UW ADRC focuses on Alzheimer’s disease biomarker research and advancing prevention methods and clinical treatment for dementia, particularly through precision medicine. The UW ADRC is also supported by the Friends of Alzheimer’s Research, the Ellison Foundation, and members of the public.

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Facebook: facebook.com/UWMBWC
Twitter: twitter.com/MemoryBrain_UW
Our ADRC researchers are often busy doing research, writing up findings, and launching new partnerships. We’ve highlighted some new publications that we think you’ll find interesting.

**Stem Cells**

*Leptomeninges-Derived Induced Pluripotent Stem Cells and Directly Converted Neurons from Autopsy Cases with Varying Neuropathologic Backgrounds* // Jessica Young, Sherry Willis, Paul Crane, Eric Larson, Thomas Grabowski, Martin Darvas, C. Dirk Keene

The ADRC has a new and improved method to investigate the biology of Alzheimer’s disease in human living tissue and test targeted therapeutics. The new method builds on an advanced genetic engineering technique, by which researchers take samples of cells from the outer lining of the brain during a study participant’s autopsy. Many of these cells are still alive. They can be reprogrammed into stem cells that can grow into any cell type, such as neurons. These lab grown cells carry the person’s genetics, and produce the disease pathology as it appeared in his or her neurons during life.

These new living ‘disease-in-a-dish’ models of Alzheimer’s disease can answer questions impossible to examine in a mouse model: How does an individual’s unique genetic background contribute to risk? Which genotypes respond to which classes of drugs? Now, researchers can compare what they see in a person’s living cells to what they see in the postmortem brain tissue and the longitudinal clinical records - which means that they can better interpret the findings from this new model of human Alzheimer’s disease.

**Genetics**

*Variants Regulating ZBTB4 are Associated with Age-at-Onset of Alzheimer’s Disease* // Elizabeth Blue, Ellen Wijsman, Thomas Bird, Timothy Thornton

The identification of genes that influence the age of onset of Alzheimer’s disease symptoms could advance the understanding of the condition and provide novel therapeutic targets. For this study, the authors studied the DNA from one large family affected by genetically inherited Alzheimer’s disease. They looked for unique patterns in the DNA of the family members who carried the genetic mutation, compared to the DNA of those who didn’t carry the mutation. They found 54 genes that influence the age at which symptoms emerge in a person. Then, by referencing the gene candidates for age-of-onset modifiers in a larger group of Germans from Russia, they found strong evidence that genes called ZBTB4 and NCSTN play important roles in cell pathways that affect the age at onset of Alzheimer’s disease symptoms. The findings point to new targets for potentially delaying the onset of symptoms, even in those at high risk of the disease.

**Neuropathology**

*First Confirmed Case of Chronic Traumatic Encephalopathy in a Professional Bull Rider* // C. Dirk Keene, Caitlin Latimer, Christine MacDonald

Chronic traumatic encephalopathy, or CTE, is a degenerative brain disease that has been linked to repeated head trauma. In CTE research, it is still unknown whether the distribution of brain lesions impacts the nature of clinical symptoms, and whether the symptoms appear at all. This knowledge is critical because as new PET scan technology makes it possible to detect CTE pathology during an athlete’s life, clinicians and researchers will need to know what the scan results mean for the person’s medical decisions or
eligibility for drug trials in the future.

In this neuropathological case study, researchers confirmed the first case of CTE in a professional bull rider, Ty Pozzobon. The authors found that in the brain of the bull rider, the CTE pathology appeared in a very different pattern than what is typically seen in American football players and other athletes. They now have more information to understand the link between lesion distribution and clinical manifestation.

The ADRC thanks the family for the incredible gift of brain donation and personal clinical history and their tireless efforts to raise awareness about repeated brain injuries in rodeo.

Prevention and Planning

Prevention of Late-Life Dementia: No Magic Bullet // Eric Larson

Half or more of Americans over the age of 90 will live with some type of dementia, and 1 in 10 people age 65 and older has Alzheimer’s disease. As the public’s interest in preventing dementia swells, the research community isn’t finding the one pill or diet that provides a sure-fire solution. However, current research suggests that a combination of activities and choices can build resilience for a healthier late life.

As the ADRC’s Eric Larson, MD, writes in this Lancet editorial, “When people ask me how to prevent dementia, they often want a simple answer, such as vitamins, dietary supplements, or the latest hyped idea. I tell them that they can take many common-sense actions that promote health throughout life and may help to avoid or delay Alzheimer’s disease, namely regular physical activity; control of vascular risk factors, including preventing or effectively managing diabetes; not smoking; and maintaining a healthy diet and weight. Engaging in cognitively stimulating activities and avoiding social isolation also are probably beneficial.”

And for doctors, he notes, “As our patients age, we should do what we can to correct their vision and hearing loss and stay aware of drugs that harm the brain and increase dementia risk, such as chronic high doses of anticholinergics.” Larson notes that the field is making progress in understanding brain aging, and many promising trials are underway.

Advance Directives for Dementia: Meeting a Unique Challenge // Barak Gaster, Eric Larson, Randall Curtis

These authors introduce the first advance directive customized for dementia care planning, available at www.dementia-directive.org. The form allows anyone to easily express their wishes in a way that is useful to future caregivers. This form aims to help align the medical interventions that people with dementia get with the care that they would have wanted. It also provides a vehicle for doctors to talk to patients, and for patients to talk to their loved ones, about cognitive impairment and ways to support brain health during mid life when the risk of dementia increases.

Population Research

Telomere Length and MRI Findings of Vascular Brain Injury and Central Brain Atrophy: The Strong Heart Study // Dedra Buchwald, Astrid Suchy-Dicey, Tara Madhyastha, Dean Shibata

The ADRC’s Satellite Core focuses on strengthening the research infrastructure to understand brain aging and dementia in American Indians. These populations show a heavy burden of illnesses related to vascular aging, such as hypertension, a risk factor for brain disease and dementia.

In a study of 363 American Indians aged 64–93 years enrolled in the Strong Heart Study and the Cerebrovascular Disease and Its Consequences in American Indians Study, the team investigated telomeres (regions of DNA that protect the ends of chromosomes, just like the plastic tips on shoelaces). Telomeres shorten over the life span, especially in the presence of inflammation, and may play a direct role in cell aging.

The authors found an association between the shortening of telomeres and the severity of vascular brain injury, suggesting that telomere length can serve as a biomarker of brain injury. Future research will determine the implications for interventions to prevent premature aging in this underrepresented population.
Resilience in Alzheimer’s Disease

6 Ways to Build a Stronger Brain, Mind, and Spirit at Any Stage of Life

By Genevieve Wanucha, UW ADRC, UW Memory and Brain Wellness

Resilience. The word has a certain vibrancy to it—the ability to spring back from hardship. You might be thinking of a forest growing back after a fire, or a community rebuilding after a hurricane. You might remember healing from a fractured bone or recovering from a broken heart. Resilience is generally defined as the ability to adapt to change in a positive way, cope with stress, or to thrive after trauma or illness.

In the world of Alzheimer’s disease research, resilience has a specific meaning. It applies to people who live into old age without apparent symptoms of dementia but are later found, at autopsy, to have brains with high burden of Alzheimer’s disease pathology. They are people who would be expected, by all measures, to develop the cognitive changes of dementia—and never do.

In the late 1980s, researchers suggested that these individuals have high ‘cognitive reserve,’ or the ability of the brain to find alternate ways of getting a job done despite underlying damage. Today, researchers have only just begun to work with the technologies needed to understand the genetic and biological mechanisms of resilience in Alzheimer’s disease, all the way to the level of individual neurons. Ultimately, the UW ADRC hopes to identify targets for therapeutics and find ways to promote resilience in those at risk of disease.

But, the human experience of dementia calls for a wider vision of resilience, one with relevance to the wellbeing of millions and millions of people affected in some way by neurodegenerative disease: the caregiver dealing with daily stress, the person living with memory loss who feels lonely, the daughter watching her mother change, or the young man coming to terms with his own inherited genetic risk of brain disease.

There is more than one way of being affected by dementia, and there is more than one road towards a resilient brain, mind, and spirit at any stage of life. Here are 6 powerful ways.
1. Pursue and Champion Education

Research shows that the developing brain builds a foundation of resilience through genetic and environmental factors that are, at least initially, outside of our control—better socioeconomic status, good pre- and post-natal care, stimulating environments, and education. Researchers aren’t exactly sure how education builds reserve, but they think that the cognitive and social stimulation of years of education promotes more connections between neurons. With more highways and byways forged over years, the brain can find new ways to process information if one area sustains damage from Alzheimer’s disease later in life—like a driver who can find alternate routes home in the case of a traffic snarl.

Recently, new brain imaging technology, called tau and amyloid positron emission tomography (PET) scans, clarified the link between education and cognitive reserve. These scans, which assess plaques and tangles of Alzheimer’s disease in the living brain, show that the brains of highly educated people can withstand the burden of Alzheimer’s pathology for longer before developing cognitive decline than people with lower amounts of education (high school, on average). In other words, high cognitive reserve raises the threshold at which Alzheimer’s disease pathology takes its toll on cognition.

While the brain benefit of education is likely related to the higher incomes and healthier lifestyles associated with educational achievement itself, there’s more to the story.

2. Mid-life Interventions

Dementia is the last stage of a process that has been going on for many years. In fact, Alzheimer’s pathology can begin to appear in the brain 15 years before the onset of memory loss. During this window, no matter one’s educational history, people who reach age 65 in good cognitive health can take actions to boost cognitive reserve and prevent the onset of cognitive decline.

“There is converging evidence that what you do in mid-life in terms of physical, cognitive, and social connectedness contributes to cognitive reserve and healthy brain aging,” says Tom Grabowski, MD, director of the UW Memory and Brain Wellness Center (MBWC)/ADRC, “and we think these kinds of factors can make years of difference in when latent Alzheimer’s disease tips into symptoms.”

The best evidence for the brain benefit of an active cognitive lifestyle comes from the Advanced Cognitive Training for Independent and Vital Elderly (ACTIVE) trial. Led by Sherry Willis, PhD, UW Research Professor of Psychiatry and Behavioral Sciences, the randomized study recruited cognitively healthy older adults who engaged in 10 hour-long sessions that trained them in skills requiring either memory, reasoning, problem solving, or speed of mental processing. Each training group showed improvements on the specific task they were trained on and reported less difficulty in everyday activities, such as managing finances or planning meals, for up to 10 years after the intervention.

In general, pursuing meaningful work is key to the health of our brains and longevity. A 2014 study out of the Mayo Clinic found that people with high scores in intellectually enriching education and occupational pursuits were more resilient in terms of cognitive decline. The researchers estimated that even for people carrying the Alzheimer’s genetic risk factor APOE4, high scores in lifetime intellectual enrichment delayed the onset of cognitive impairment by about 8-9 years, compared with lower exposure to intellectually enriching activities.

Interestingly, the study also showed an independent link between higher cognition and the pursuit of activities that challenge and engage the mind in mid- to late-life.

Reading Material


3. Mindfulness and Meditation

Mindfulness meditation involves daily sessions of focused attention on the present, on purpose and without self-judgment. The idea is to cultivate a sense of gentle openness and detached curiosity about the here and now, including life’s difficulties. Mindfulness meditation has real-life benefits to people with dementia for several reasons.

Foremost, the practice can help build mental resources for dealing with frustrations and anxiety. “Mindfulness meditation is about retraining how we respond to our
environment, especially when stressed,” says Kristoffer Rhoads, PhD, a neuropsychologist at MBWC. “This becomes very important as we think about cognitive loss and anticipatory grief. It’s valuable for us to have a way to help mediate the stress response to having memory problems, to disengage from the ‘I used to be able to do this and now I can’t do that,’ to much more of an acceptance of ‘this is where I’m at right now, regardless of where I was before’.”

Mindfulness meditation is also well suited to people with dementia because the brain areas involved in tuning into the ‘here and now’ are the same brain areas that stay relatively preserved as dementia progresses. Activities that encourage mindfulness—appreciating or doing artwork, walking in a garden, listening to music, or simply watching birds in the backyard with a friend—are ones that people with memory loss can approach from a position of strength.

Caregivers, who often bear a great deal of daily responsibility, may not feel as though they can make another commitment. Yet, a robust meditation practice is worth the 10 or 20 minutes a day. After an 8-week meditation course, caregivers in a UCLA study showed decreases in markers of cellular aging (an important predictor of overall health and resilience), less distress, and better mood and thinking skills.

And for everyone, mindfulness meditation likely holds value for preventing or delaying cognitive decline, as suggested by research showing re-wiring of the brain, improved emotional resilience, and reduced modifiable midlife risk factors for Alzheimer disease, such as high blood pressure and cholesterol. What’s more, researchers saw these positive changes after 8 weeks of guided practice in people with no prior history of meditation.

“By building a habit of mindfulness at any point in life, you are putting yourself in a position to retain many important aspects of cognitive function,” says Dr. Grabowski.

Resources
Mindfulness Northwest: www.mindfulnessnorthwest.com/
The Science of Meditation by Dr. Kris Rhoads: www.alzwa.wordpress.com/2015/12/22/the-science-of-meditation/

4. Build a Powerful Caregiver Toolbox

The Memory and Brain Wellness Center (MBCW) thinks a lot about caregivers and their physical and emotional resilience.

“From the very beginning of dementia caregiving, there needs to be shift in approach from an acute illness to a chronic one,” says Marigrace Becker, Program Manager for Community Education and Impact at the MBWC.

“Caregivers need a strategy for the long haul, which is an important foundation for long-term emotional resilience.”

The MBWC offers Powerful Tools for Caregivers, a free educational series at Harborview Medical Center designed to help caregivers take care of their own selves while they care for a loved one. Over 6 weeks, the group of participants builds new habits in effective communication, making challenging decisions, moving through difficult emotions and conversations, and getting connected to helpful resources.

“It’s so cool to see this switch that gets turned on for people,” says Becker. “In some cases, they may not have been thinking about themselves, and become excited about the permission to engage in self-care and seek support from others.”

From being involved in programs like this one, the MBWC team has gathered some helpful resilience-building strategies for caregivers. Be willing to be assertive and ask for help. Say no to things you can’t take on. Find creative ways to carve out pockets of time to take breaks to enjoy a hobby, eat well, and exercise.

Resources
MBWC Community Events and Programs: www.depts.washington.edu/mbwc/events/community-events-programs
Sign up for Powerful Tools for Caregivers: Mondays, 4/23 - 6/4, 1:30 - 3 pm. Contact mbecker1@uw.edu 206.744.2017

5. Find the Right Support Group

Support groups for care partners, family members, or people living with dementia can be powerful ways to connect with others dealing with similar feelings and challenges. But sometimes, it’s difficult to find the perfect fit.

Take Laurie Bahr and the late Marty Bahr, who received a diagnosis of early-onset Alzheimer’s disease at age 50 in 1995. In Chicago, they tried several Alzheimer’s disease support groups. But they found little in common with the participants, who were all much older. The couple pushed hard at Rush University Medical Center for more recognition of younger onset dementia and services designed specifically for people who often fall ill before retirement and Medicare/Medicare eligibility, and often
have children still living at home. In 2004, Rush University and the Alzheimer’s Association formed the first ever support group for people living with early-onset Alzheimer’s, Without Warning (www.without-warning.net). Now, it offers a welcoming community resource to over 60 people in the Chicago area.

Another neurodegenerative disease called frontotemporal degeneration (FTD) can feature changes in language and emotional behavior and often onsets in middle age. For people who are caring for a parent or spouse, it can be especially important to find a support group that fits. A family going through the experience of FTD must often grieve the loss of different aspects of an intimate relationship than a family dealing with late-onset Alzheimer’s disease.

“Finding a support group that focuses on FTD is key,” says Sharon Denny, President of the Association for Frontotemporal Degeneration. “It means finding a place to mourn the loss of relationship caused by the disease, so that you can go back to that relationship with more room to be free and creative and stay in the present.” In other words, the right support group for your own family situation can foster resilience.

Resources
Alzheimer's Association
• Support Groups: www.alz.org/apps/we_can_help/support_groups.asp

Association for Frontotemporal Degeneration
• Support for Care Partners: www.theaftd.org/life-with-ftd/support-for-caregivers
• Support for People with FTD: www.theaftd.org/life-with-ftd/i-have-ftd/support

UW Memory and Brain Wellness Center
Living with Memory Loss Handbook (UW MBWC) www.depts.washington.edu/mbwc/resources/living-with-memory-loss

6. Join Your Community
The concept of dementia-friendly communities is spreading around America, from Boston’s ARTZ and I’m Still Here Foundation, and Philadelphia’s memory cafés, dancing, and cognitive comedy programs, to Seattle’s Momentia grassroots movement, to name a few. Here in the Puget Sound region, people living with memory loss, their loved ones, and members of the entire community, can find a variety of dementia-friendly programs—from walks at zoos and public botanical gardens, to art classes and museum tours.

Under the banner of Momentia, these programs aim to empower people with memory loss and their loved ones to stay active and connected in the community. For people living with dementia, and their friends and caregivers, these programs can help build resilience of the brain, mind, and body through fresh air, exercise, creativity, and social time - all antidotes to loneliness, boredom and anxiety. These programs also present interested members of the public with volunteer opportunities, new perspectives, and friends.

Recently, as part of a year-long advocacy effort, members of the Gathering Place early stage memory loss program at Seattle’s Greenwood Senior Center made posters with hopeful messages of support for others diagnosed with dementia. Our team at the MBWC proudly displays these posters in our clinic. One by Jean Mills has the words, ‘It’s Hard, But We’ll Get Through It.’ (Photo Credit: Jim Lee Carey) “Her message touches on where resilience truly comes from,” says Marigrace Becker. “From a ‘We.’ From a connection with others.”

Resources
Momentia Calendar of Events: www.momentiaseattle.org/new-events/?view=calendar
MBWC Community Events and Programs: www.depts.washington.edu/mbwc/events/community-events-programs
The EARLY Study is a global study researching the risk associated with the buildup of amyloid plaques in the brain, and will use the latest technological advances to measure beta-amyloid in the brain. Stopping or slowing down amyloid plaque formation in the brain may delay memory loss associated with Alzheimer’s disease. The purpose of the EARLY Trial is to evaluate the safety and efficacy of an investigational medication in people at risk of developing Alzheimer’s disease dementia.

You may be eligible to participate in the EARLY study in Seattle if you:

- Have generally normal memory and thinking abilities
- Are 60-85 years old
- If you are age 60 to 64 years, you will need to have a parent or sibling with Alzheimer’s disease, and/or have been told that you are at risk for developing Alzheimer’s disease (that you have the APOE 4 gene or a proven buildup of amyloid in your brain)
- Have a close friend, relative, or spouse who can come to some trial visits with you
- Are willing to take an investigational medication

Contact: Yeung Tutterrow, PhD, PMP, UW Study Coordinator | ylt2@uw.edu | 206-897-6350

More Information: EARLY Website - www.earlytrial.com/

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**We Need Your Help!**
- We are seeking to enroll 1,650 volunteers in this clinical trial
- We’ll need to screen up to 16,500 people to find the right participants
- You can help with this research

**What is the EARLY trial?**
- A global clinical research trial in people who are at risk for developing Alzheimer’s disease
- The EARLY trial is researching the safety and efficacy of an investigational medication, taken as an oral tablet
- If you qualify, you will receive study medication (or placebo) and study related medical care at no cost

**What to Expect:**
- The EARLY Trial has three parts which will take place over five years
- Screening period determines if you qualify for entry into the trial
- Treatment period includes regular visits for you and your study partner
- Follow-up period allows us to check on your general health and thinking abilities
Then: In March of 2017, Tom Grabowski, MD, Director of the UW Memory and Brain Wellness Center/ UW Alzheimer’s Disease Research Center (ADRC) testified in front of the Senate Appropriations Subcommittee in support of a $414 million increase in federal Alzheimer’s disease research funding, needed in order to achieve the goals of the National Plan to Address Alzheimer’s Disease to prevent and effectively treat Alzheimer’s disease by 2025, and advocated for by the Alzheimer’s Association and the Alzheimer’s Impact Movement (AIM).

“I urge it on you with enthusiasm, and with optimism, that we can defeat this disease,” said Dr. Grabowski.

Now: The 2018 Omnibus spending bill includes the hoped for Alzheimer’s disease research funding! Here’s what this bill means for researchers who study Alzheimer’s disease and other dementias (besides “new summer plans to write a lot of grants!”) The bill:

• Gives the National Institute of Health (NIH) a $3 billion boost, to $37 billion, the biggest percent increase NIH has received since a 5-year effort to double the agency’s budget ended in 2003.

• Includes the requested $414 million in new NIH funding for Alzheimer’s disease research, a 30% increase, that puts total funding for research there at $1.8 billion. “Alzheimer’s advocates are gratified that members of Congress responded to our urging to continue the significant growth in NIH funding we’ve seen in recent years for dementia research,” says Peter Newbould, the Public Policy Manager of the Alzheimer’s Association WA State Chapter. Funding increases accelerate research, but there is still more to be done. It will take a sustained investment from Congress if we’re to continue making progress toward effective treatment and a cure.”

• Rejects a proposed cut to the overhead payments that accompany NIH grants to universities to help maintain needed research infrastructure and equipment.

• Included Kevin and Avonte’s Law, bipartisan legislation to protect seniors with Alzheimer’s and dementia and children with developmental disabilities who are prone to wandering. Kevin and Avonte’s Law reauthorizes a Department of Justice program that helps local law enforcement officials quickly identify wandering individuals with Alzheimer’s and reunite them with their families. State and local law enforcement agencies, state health care agencies, and nonprofit organizations will have access to resources to establish and run programs to prevent wandering and to locate missing individuals.

• Also, frontotemporal degeneration (FTD), a spectrum of brain diseases that impact language and behavior and lead to dementia, has been added to a short list of diseases to receive research funding through the Department of Defense under the Congressionally Directed Medical Research Program, with support led by Sen. Chuck Schumer (D-N.Y.).

The Fight Ahead: According to the Alzheimer’s Association, Alzheimer’s is the most expensive disease in America, costing more than heart disease and cancer. Nearly one in every five dollars of Medicare spending is spent on people with Alzheimer’s and other dementias. However, even with the recent funding increases, in 2017, the NIH spent only $100 on Alzheimer’s research for every $12,500 Medicare and Medicaid spent caring for people with the disease. As Dr. Grabowski told the committee of senators in 2017, “By 2050, cases of Alzheimer’s disease will about triple, so were talking a trillion dollars of direct and opportunity costs. The incidence of Alzheimer’s disease-type dementia doubles every 5 years after age 65, and so if we could delay onset by 5 years, we could cut the number of cases in half, and by inference, we could cut dementia-related costs in half.”

For Funding Year 2019, the Alzheimer’s Association and AIM is requesting a $425 million increase in NIH funding, through the Professional Judgment Budget submitted directly to Congress by NIH.
How do we know what we should be eating to keep our brains healthy? One way is to look at epidemiology studies. This involves studying a group of people over time, surveying what types of foods they tend to eat, and looking at how often they develop Alzheimer’s or other forms of dementia.

Ingestion of fish or fish oil has been studied as a potential way to prevent or treat Alzheimer’s. Fish oil consists of several ingredients but the main two include the free fatty acids DHA and EPA. These are examples of polyunsaturated fatty acids, or PUFAs, and are also called omega-3 fatty acids, because of the structure of the fatty acid chain. People who eat a diet low in PUFA are at higher risk of developing Alzheimer’s disease. In addition, patients with Alzheimer’s have low levels of these fatty acids in their brains. These findings don’t prove that low PUFA diets cause Alzheimer’s, but it suggests that this is an area to study further.

The best evidence for any intervention is a clinical trial: Take a group of people with an illness, give half of them the treatment and the other half a placebo, and look for differences at the end. Several groups have studied whether supplementation with DHA and EPA benefit patients with Alzheimer’s, but with mixed results. When there are mixed results in the medical literature, a group of scientists will often group all of the data together and analyze it in a process called a ‘meta-analysis.’ One such study is the Cochrane Library review in 2016, which found that overall there was no convincing evidence for the use of omega-3 PUFA supplements in treating patients with mild to moderate Alzheimer’s disease. This conclusion was based on high quality evidence and included a lot of different measures of cognition and function. Lead author Marion Burckhardt of the University Halle-Wittenberg, Germany, writes, “It is possible that omega-3 PUFAs improve instrumental activities of daily living, such as more complex activities (i.e. shopping), when taken for a longer period of time, but this has to be confirmed in further trials.” The review also pointed out that side effects were uncommon, so this treatment is likely safe for the vast majority of patients.

Although these PUFA trial results are disappointing, I think the overwhelming epidemiologic evidence still supports eating foods high in PUFAs, such as seafood. One study from 2016 showed that eating just one seafood meal a week over a 12-month period was associated with less decline in certain types of memory and mental processing speed. Seafood in this study was defined as any kind of fish, and it also included shellfish such as shrimp, lobster or crab. The American Stroke Association guidelines already recommend eating fish twice a week for vascular health, and I think we can add ‘cognitive health’ to that as well.

In the Pacific Northwest, we are lucky to have sources of a variety of sustainable and tasty seafood. In addition, when we eat a healthy item such as fish fillet, it often replaces an unhealthy item such as a cheeseburger. If you were going to supplement your diet with fish oil, it is helpful to know that 4oz salmon has 950mg DHA and 250mg EPA on average. A vegan alternative to seafood is to ingest sources of EPA and DHA from algae oil.

As I continue to research nutritional factors for Alzheimer’s, I keep coming back to the basics: more whole grains rather than simple sugars, more fruits and vegetables rather than junk food, and more servings of seafood rather than red meats. And don’t forget to exercise, whether it’s chasing down a fishmonger at Pike Market, or parking your car further from the door at the supermarket where you buy your fish!

Sources
APOE 4 and the associations of seafood and long-chain omega-3 fatty acids with cognitive decline: www.ncbi.nlm.nih.gov/pubmed/27164694
Fast Facts

- Fish and algae oil are good for our health because of their content of polyunsaturated fatty acids (PUFA). DHA and EPA are the main free fatty acids.

- Low consumption of PUFA increases the risk of Alzheimer’s disease.

- Eating just one seafood meal a week over a 12-month period is associated with less decline in certain types of memory and mental processing speed.

- The American Stroke Association recommends eating fish twice a week for heart health, and cognitive health can join that list.

- 4oz of salmon has 950mg DHA and 250mg EPA. You can get EPA and DHA from algae oil.

- One simple reason why eating seafood is a healthy choice: For many of us, if we are eating a fish fillet, that’s likely replacing a red meat protein high in saturated fat, maybe a cheeseburger.

Dr. Angela Hanson, MD
ADRC Awards for Ambitious New Ideas
Learn about the newly funded 2018-2019 ADRC pilot projects

Michelle Erickson, PhD, Research Assistant Professor, UW Gerontology and Geriatric Medicine / Research Biologist, VA Puget Sound Healthcare System

Serum amyloid A as a liver-derived mediator of Alzheimer’s disease: Serum amyloid A is a protein made by the liver during inflammation. It can enter the brain from blood via transport across the blood-brain barrier and has been shown to increase in the brains of individuals with Alzheimer’s disease. This project aims to test the causal relationships of serum amyloid A to Alzheimer’s-associated pathology and cognitive symptoms. Positive findings from this pilot study could warrant future work to investigate the potential of serum amyloid A as a novel biomarker and therapeutic target for Alzheimer’s disease.

Paul Valdmanis, PhD, Assistant Professor, UW Division of Medical Genetics

Contribution of human-specific repeat expansions to Alzheimer’s disease: Several genes have been identified as causing or increasing risk for Alzheimer’s disease, however, despite extensive sequencing approaches, the genetic basis of a substantial proportion of Alzheimer’s disease cases remains unknown. The Valdmanis Lab has identified repeats in brain-expressed genes that are specifically expanded in the human genome, and they hypothesize that these genes influence development or progression of Alzheimer’s disease. In this project, the team will investigate the unique structural properties of gene expansions that may interact with other genes implicated in Alzheimer’s disease, which may explain the genetic basis of a proportion of late-onset or genetically unresolved cases of early-onset Alzheimer’s disease. If so, patients can be grouped based on gene expansion size and receive earlier gene-specific intervention strategies.

Hesamoddin Jahanian, PhD, Assistant Professor, Integrated Brain Imaging Center, UW Department of Radiology

Development of Ultrafast Resting-State fMRI as a Biomarker for Alzheimer’s disease: Alzheimer’s disease causes disruptions of the brain’s patterns of network activity, even at very early stages. Researchers can detect these changes using a technique called ‘resting state functional magnetic resonance brain imaging’ (rs-fMRI). rs-fMRI measures may serve as biomarkers to predict and track the progression of neurodegenerative disease. Now, Dr. Hesamoddin Jahanian, a new faculty member in the UW’s Integrated Brain Imaging Center (IBIC), will be using a dramatically improved technique, dubbed ‘ultra-fast rs-fMRI,’ which collects 4 times as much data about brain connectivity in the same amount of time as the traditional method—in fractions of a second, faster than a heartbeat. This advance makes it possible to detect subtle short-term alterations in brain function, such as in early Alzheimer’s disease, perhaps before structural brain changes occur. His team will apply ultrafast rs-fMRI along with machine learning techniques to develop a non-invasive biomarker for Alzheimer’s and related diseases.

Richard S. Morrison, PhD, Staatz Professor of Neurological Surgery/ Director, UW Center for Neuroproteomics

Epigenetic role for histone deacetylase 2 in Alzheimer’s disease pathogenesis: Histone deacetylase 2 (HDAC2) is an enzyme that plays an important role in the aging process. Recent studies in mouse models and human cases of Alzheimer’s disease demonstrate that HDAC2 is abnormally elevated and harms gene expression in brain cells. Dr. Morrison’s goal is to use both patient tissue and stem cell technology to determine if dysregulated HDAC2 expression may represent an age-related risk factor for the onset and progression of Alzheimer’s disease. This project will provide new insights into the contribution of HDAC2-mediated epigenetic regulation to Alzheimer’s disease, with the aim of developing HDAC2 therapies that will delay the onset and progression of Alzheimer’s disease.
Neurodegeneration by adipocyte-derived exosomes in dementia: Dementia risk factors include chronic conditions common in middle age such as hypertension / cardiovascular disease, type 2 diabetes mellitus, and cerebrovascular disease. These conditions are linked with adiposity, or the condition of being severely overweight or obese. The relationship between adiposity and dementia is puzzling – while high adiposity in middle age is associated with a three-fold increased risk of dementia 30 years later, weight loss is common in dementia. In fact, a decline in adiposity indicates impending progression of dementia. The Freishtat Lab hypothesizes that genes related to the function of fat cells are critical for brain health and may be targets for primary prevention. This project will set the framework to study the pathologic mechanisms underlying weight loss and onset or progression of Alzheimer’s disease, utilizing clinical data and biospecimens from participants in the UW ADRC Clinical Core, as well as the UW Adult Changes in Thought (ACT) Study.

Robert Freishtat, MD, MPH, Professor of Pediatrics, Emergency Medicine, and Integrative Systems Biology, George Washington University School of Medicine and Health Sciences

Kimiko Domoto-Reilly, MD, assistant professor of neurology at the UW School of Medicine and neurologist at the Memory and Brain Wellness Center, will lead the Lewy Body Center of Excellence at the University of Washington. She has expertise in the diagnosis and treatment of individuals with atypical dementias, including Parkinson’s disease syndromes and frontotemporal degeneration spectrum disorders. Her research focuses on multimodal biomarkers. Dr. Domoto-Reilly is the site principal investigator for the national Frontotemporal Degeneration Consortium, supporting the UW Memory and Brain Wellness Center/ADRC in its growing focus on atypical dementias.

Kimiko Domoto-Reilly, MD

The UW Memory and Brain Wellness Center encompasses all of the clinical and research opportunities for people with Lewy Body dementia at the UW Medical Center, Harborview Medical Center, and the VA Puget Sound Health Care Center. Dr. Debby Tsuang, professor of psychiatry at the UW School of Medicine, runs the Dementia with Lewy Body Consortium Study site at the VA Puget Sound Health Care Center/UW, one of the nine participating clinical centers. This study will collect clinical information, brain scans, and biological samples from people that have dementia with Lewy bodies. This information will help researchers to discover new biomarkers for Lewy Body dementia and improve diagnosis and treatment. To learn about participation, please visit: www.lbda.org/go/biomarkers-lbd-clinical-study-dlb-consortium-dlbc

Upcoming! The Memory and Brain Wellness Center will be hosting a Resource & Education Day for people with LBD and their families in June. To get on the e-mail list about this event, please contact mbecker1@uw.edu
For Seattle resident Jean Mills, living with memory loss has been a catalyst to help others – and has catapulted her to national fame!

By Marigrace Becker, UW Memory and Brain Wellness Center

Pictured here, Jean Mill’s portrait won Grand Prize early this year in Dementia Friendly America’s contest for photos representing “the essence and diversity of what it means to be a dementia-friendly community.” Her image is now featured on their website and social media platforms, spreading her positive message across the country. “I’m just happy for the opportunity to reach out to anybody going through the same thing,” states Mills.

Mills’ award-winning portrait, and the poster she holds, grew out of year-long advocacy effort she contributed to with the Gathering Place early stage memory loss program at Seattle’s Greenwood Senior Center. She and fellow group members produced a multimedia project called “Living With Memory Loss: In Our Own Words” – culminating in a short documentary film which debuted last fall.

One guiding question provided the framework for the entire project: what would you want the world to know about your experience living with memory loss?

Distilling their responses into a single phrase, some group members shared wisdom for others walking this path – with messages like “Be brave,” “Take one day at a time,” and “Let your light shine.” Others targeted the general public, aiming to build understanding and respect: “Please be patient with us.” “Have compassion for all.”

Group members designed vibrant posters around these themes, had professional portraits taken with their posters, and shared additional insights in filmed interviews.

According to Mills, a key goal was to convey that “you’re not alone if you have memory loss – there are a lot of people that have it.” The project also aimed to raise awareness about supportive programs like the Gathering Place that can provide social connection. “I want people to have a way to approach it and be able to talk about it, and to be with other people who are in the same boat,” she states.

For fellow group member Neil Murphy, who chose the statement, “I’m still here,” it was important to communicate that life continues beyond diagnosis. “It’s a simple phrase and a simple thought,” he states, “but no matter what’s happening, I’m alive and well, and… I’m not perfect, but I’m happy!”

For Murphy, the project is one of many ways he contributes in his community.

“You could say, ‘oh I’ve got memory loss, woe is me,’ or ‘oh, we’ve got these memory problems so we can’t really do anything.’ Or we can say, ‘we’ve got these memory problems, but to heck with it, we’re going to do the best we can!’”

Mills takes a similar pro-active approach to life. Her poster’s statement, “It’s hard but we’ll get through it,” sums it up. She explains, “Every day is a battle. And we’re not the first to have come upon it. I don’t like to think that I can be beaten by something – I like to take any advantage that is available to me. Going to the Gathering Place is something I enjoy for that.”

Portrait Credit: Jim Lee Carey
Reflecting on the overall project, Mills states, “I hope it has a big impact. To be meaningful is one of the greatest things a person can be.” Murphy concludes, “Knowing that the project touched the heart and mind of one person would be enough – and I know that’s already happened!”

This project is one in a series of advocacy efforts that Gathering Place members have taken part in over the years – from an anti-stigma campaign, to writing an encouraging letter that is distributed to people newly diagnosed in the Memory & Brain Wellness Clinic and beyond. “The group had a lot of history in advocacy,” states facilitator Erika Merz. “They have a lot of passion and want to do things that make the world a better place.”

From all reports, the project is certainly having that result. “So many people shared excitement about the film after the initial screening last fall,” states Merz. “As a society we’re so logic focused, we see people as lacking X Y Z instead of really seeing each other’s hearts. In the Gathering Place, I see people grow and learn, expand, connect, create new ideas – in really profound ways. Snippets of that show in this film.”

This is the kind of reframing that the UW Memory & Brain Wellness Center is so keen to support – reinforcing that people with dementia maintain a variety of strengths and remain valuable members of the community. We provided consultation on the documentary film, and now gratefully display the posters in clinic conference rooms as a way to provide hope to those receiving a new diagnosis. Moving forward, we hope to integrate the portraits into statewide efforts to promote positive images of people with dementia, and challenge stigma.

Would you like to view the group’s short documentary? Join the Greenwood Senior Center for a free film screening from 6:30 – 8:00 p.m. on Wednesday, May 16. RSVP to 206-297-0875.
Co-Participants: The Unsung Heroes of ADRC Research Studies

By Justina Bagger, UW Alzheimer’s Disease Research Center

Every day, I venture up fourteen floors in the Ninth and Jefferson Building in Harborview Medical Center to start another day as a Research Coordinator at the UW Alzheimer’s Disease Research Center (ADRC). My job involves helping to run the ADRC’s longitudinal clinical research study. I do things such as schedule participant visits, process blood samples, and administer memory and thinking tests, also called neuropsychological testing, or just cognitive tests.

To me, cognitive testing is more than just scores. The purpose of cognitive testing is to detect the onset and worsening of cognitive decline or, hopefully soon, the improvement after an intervention. It’s also an important step in my career goal to become a clinical neuropsychologist and conduct research of my own.

Cognitive Testing at the ADRC

On a research participant’s first visit, we establish his or her baseline starting point of memory and thinking skills by giving him or her a series of tests. These exercises may involve copying drawings, naming pictures, reciting a brief story they heard five minutes ago, or repeating back a sequence of numbers and letters. These varied tests capture a snapshot of the person’s long and short-term memory and many other domains of thinking such as attention and language.

This study, run by the ADRC clinical core, is called “longitudinal” because every year after the baseline tests are done, the people come back and do the same cognitive tests. This is how we detect significant changes in cognition over a person’s life.

Taking into account our individual differences is crucial for interpreting the results of thinking and memory tests. Each person’s own strengths and weaknesses are a key factor in how neuropsychological testing is interpreted. For example, if someone was always bad at managing money, then poor performance on the finance test questions might not reveal a problem, but it would signal a troubling change for someone who used to be a banker.

But how does our team learn about the detailed life history that a research study demands? After all, a participant might not report everything we think is relevant. We need to have a co-participant (a family member or close companion) who can tell us about the participant’s history and how they think that participant is currently doing.

Co-Participants

Co-participants are a critical part of interpreting neuropsychological testing over time, as they give more detailed background and paint a bigger picture than just scores from tests. Every research participant in the ADRC longitudinal study has a co-participant; it is so important that we actually require a co-participant to be co-enrolled!

I got my first exposure to cognitive tests and the role of co-participants during a summer fellowship at Johns Hopkins University School of Medicine. I was involved in work on potential health or lifestyle predictors of Alzheimer’s disease (such as sex, age, pre-existing neurological diseases, or traumatic brain injuries) using a database of several hundred Alzheimer’s disease research participants. Each participant had a diagnosis of memory decline or dementia and a co-participant(s) from his or her family.

In our statistical analysis of the data from co-participants, we found a pattern in how different generations of a family perceived changes in a loved one’s memory function. In other words, we found that spouses or siblings generally reported more memory loss than did grandchildren.

This finding led to bigger questions for me. “Why?” was my main question, and at the 2017 International Neuropsychological Society Conference, I presented my ideas in a poster session. One theory is that a grandchild
could be expecting a grandparent to have memory decline. Another theory is that grandchildren might not have known the grandparent in decades past when they did not have any cognitive problems, leading them to have a skewed sense of what is normal thinking for their grandparent.

While both of these ideas seem logical to me, they are just starting points for my research plan to investigate co-participant reports further. Co-participant reports sometimes are viewed as less than ideal because they are very subjective: there are many variables that can influence how co-participants gauge the mental status of the participant, which might reflect the co-participant’s experience instead of the participant’s abilities. For example, something as seemingly simple as a co-participant’s mood, or even normal lapses in the co-participant’s recall, could potentially skew their report.

To me, this is an opportunity to make this abundant resource more reliable. As part of my long-term research goals, one project I want to tackle would be creating mathematical adjustments to apply to the co-participant reports. The end goal would be to take into account different factors that affect co-participant reports, such as generational differences, to capture the truest state of the participant. This is important because when we are able to accurately determine the state of the participant—even his or her communication and short-term memory change over time—we can improve the effectiveness of research and care.

A Debt of Gratitude

To me, all the co-participant reports are a gold mine of potential information for our center, and for my long-term project. This project will take time and plenty of more data points. So, to all of the co-participants who are involved in our studies at the UW ADRC, thank you for your past and future reports about your loved ones. The ADRC clinical team members, who all conduct co-participant interviews, appreciate your selfless contributions to our research and find them to be an especially meaningful part of the job. With your support, the ADRC will continue to move research forward to discovering treatments and providing the best care possible.

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To learn about research participation at the ADRC, please visit: [www.depts.washington.edu/mbwc/adrc/page/participation-in-research-brain-donation](http://www.depts.washington.edu/mbwc/adrc/page/participation-in-research-brain-donation)

These are the hardworking research coordinators, who put in many hours making sure ADRC studies and clinical trials run smoothly and handling inquiries about research participation.

![Person 1](image1.png)  Justina Bagger, Research Coordinator

![Person 2](image2.png)  Jessica McDougall, Research Coordinator

![Person 3](image3.png)  Yeung Tutterrow, PhD, PMP, Research Coordinator

![Person 4](image4.png)  Kimberly Lowell, Research Coordinator

![Person 5](image5.png)  Christina Caso, Research Analyst

Other members of the ADRC clinical research team include:
Suman Jayadev, MD, Clinical Core Lead, Principal Investigator (PI)
Kimiko Domoto-Reilly, MD, Clinician, PI
Kristoffer Rhoads, PhD, Neuropsychologist
Michael Persenaire, MD, Clinician
Angela Hanson, MD, Clinician
Kris Kauno, CCRC, Clinical Trials Supervisor
Katy Sims, MN, Research Nurse Coordinator
Kelly Green, PA-C, Physicin’s Assistant
Mackenzie Moore, UW ’18, a senior undergraduate in the UW Department of Molecular, Cellular, and Developmental Biology, has received the Mary Gates Research Scholarship for her Alzheimer’s disease research. She hopes to begin her medical education next fall and intends to pursue geriatric medicine.

In her freshman year at UW, Moore sought out an undergraduate research opportunity in the group of Paul Crane, MD, MPH, Professor, UW Medicine/ADRC, on the Executive Prominent Alzheimer’s Disease study. In this project, the group worked to categorize Alzheimer’s disease cases based on relative deficits in four cognitive domains: memory, language, visuospatial functioning, and executive functioning. Looking deeper, they showed that they could use this method of categorization based on genetic differences between the cognitive groups. Moore presented the research at the Alzheimer’s Association International Conference in London in July 2017.

The Mary Gates Research Scholarship recognizes her work in the Crane group to determine some of the differences in vascular risk factors, such as atherosclerosis and hypertension, across cognitive subtypes of Alzheimer’s disease. Progress on such research could help clinicians in treating patients based on their personal profile of vascular risk factors, for example.

Moore is excited about the award for personal and practical reasons. “It’s cool to have my work recognized after doing it for so long. The extra financial resources from the Mary Gates Scholarship have been most helpful for the medical school application process, which is expensive. I’ve also had the opportunity to attend events where I could share my research with scientists and other students share research. I don’t get that many chances to talk about my Alzheimer’s disease work with my peers.”

In her work at a retirement home as a waitress and at the reception desk, Moore has grown certain of her future career path. “I’ve really gotten to see what I’ve been researching in real life and it makes my research more meaningful and convinced me I want to work with geriatric populations in the future, clinically,” she says. “I’d be interested in figuring out ways to better support families of people who have Alzheimer’s disease because of the lack of effective treatments.”

Now well on her way to a medical career, Moore acknowledges Dr. Crane’s sustained mentorship for students interested in Alzheimer’s disease, as well as the ample research opportunities for undergraduates at the UW.

Information for UW Undergraduates

Mary Gates Research Scholarships are one of the best sources of undergraduate research funding available on the UW campus. Approximately 160 Mary Gates Research Scholarships are awarded to UW undergraduates annually. The scholarship provides $5000 disbursed in two installments of $2500 over two quarters.

Learn More: [www.washington.edu/undergradresearch/students/funding/marygates-research/](http://www.washington.edu/undergradresearch/students/funding/marygates-research/)
Garden Discovery Walks
Spring 2018

Savor the season and explore nature with others living with memory loss and family and friends

First Fridays
10 a.m.-12 p.m.
FREE!

April 6: Rainier Beach Urban Farm and Wetlands
May 4: Bradner Gardens
June 1: Kubota Garden

Enjoy a walk through a Seattle public garden, followed by a creative, nature-inspired project led by a skilled facilitator. Light refreshments provided, bring a bag lunch (optional).

Pre-registration required:
Cayce Cheairs, (206) 615-0100, cayce.cheairs@seattle.gov

Offered in partnership:
The UW Memory & Brain Wellness Center is proud to play a role in the Dementia Action Collaborative (DAC), a public-private partnership committed to implementing the Washington State Plan to Address Alzheimer’s Disease and Other Dementias. With over 100,000 Washingtonians living with dementia, and another 300,000 people caring for a loved one with dementia, a statewide approach to dementia care and supportive services has never been more crucial.

Convened in April 2016, the DAC involves three subcommittees - Public Awareness and Community Readiness, Health and Medical, and Long-Term Supports and Services. Committee members are tasked with completing the over 100 recommendations included in the plan. In the first two years, the DAC has focused on high priority short-term recommendations that require little to no funding. A substantial amount of work has been accomplished!

As of now, we are excited to have new support. The final Supplemental Operating Budget, approved by the Senate on March 7 and the House on March 8, includes $160,000 for four dedicated staff to coordinate and advance the work of the DAC.

See below for some highlights within each subcommittee:

**Public Awareness and Community Readiness**

- Produced a Dementia Safety Info Kit, which compiled the best available information on topics such as home safety, driving, wandering, fall prevention, and avoiding financial exploitation.
- Completed a fact sheet on dementia-friendly communities for Washington State, which was distributed within over 15 statewide networks and presented in venues such as the Washington Library Association and UW Elder Friendly Futures conferences.
- Worked with the National Asian Pacific Center on Aging to produce action guides for service providers and policy makers about connecting with the Asian Pacific Islander population around dementia.

**Health and Medical**

- Strategically aligned with the governor-appointed Bree Collaborative that focuses on improving healthcare services throughout the state. Convened an expert panel which provided statewide standards for dementia care via the Bree Alzheimer’s Disease and Other Dementias Report and Recommendations.
- Completed a position paper, Brief Cognitive Screening Tools for Primary Care Practice, to provide guidance on best practices in cognitive screening.
- Produced a Washington state specific Clinical Provider Practice Tool, based on a successful tool used in Minnesota.

**Long-Term Supports and Services**

- Published a Dementia Road Map for family caregivers providing information about what to expect, suggested action steps and helpful resources.
- Worked with the Public Awareness and Community Readiness committee to produce a webinar and written guidance on how to start an Alzheimer’s Café – a simple yet effective social engagement program for people with dementia and their families.

Reflecting on the progress to-date, DAC Program Manager Lynne Korte states, “It’s amazing how much this group has accomplished. They are truly committed to making life better for people living with dementia. It’s inspiring to see the dedication, energy and awareness building across the state.”

Moving forward, one DAC priority is outreach around these newly developed educational materials and resources. UW MBWC Clinical Neuropsychologist Kristoffer Rhoads, PhD, who chairs the Health and Medical subcommittee, states that his team’s primary goal for 2018 is “to work closely with key stakeholders around the state, including the legislature, to develop a public-private partnership emphasizing training, dissemination, and implementation of the dementia care guidelines and tools that we now have available.”
In service of this broad marketing effort, the Public Awareness and Community Readiness committee is making a number of enhancements to the state’s Community Living Connections website, to be unveiled later this year. With these updates, the website aims to be a portal of resources and information for people living with dementia and their families.

Meanwhile, other significant projects continue to unfold. I’m eager to advance work alongside the Long-Term Supports and Services subcommittee to produce a series of guides and statewide webinars about program models that enable people with dementia and their loved ones to stay active and connected in their communities. For our first webinar on starting an Alzheimer’s Café, we received registrations from over 30 counties. I’m confident the next webinar on “dementia-friendly” walking groups will have a similar impact. See: Alzheimer’s Cafe Model: A Guide to Getting Started in Your Community - www.depts.washington.edu/mbwc/content/page-files/DAC_Alz_Cafe_Webinar_-_Jan_24,_2018.pdf

With much having been accomplished, and other successes on the horizon, it’s a promising time for the DAC. Forging ahead to fully implement the Washington State Plan to Address Alzheimer’s Disease and Other Dementias, we can ensure that the growing number of people with dementia in our state, and their loved ones, receive the care and support they deserve.

Want more information on the resources mentioned in this article? Visit the DSHS Dementia Action Collaborative website for a more detailed 2017 Progress Report and other materials. www.dshs.wa.gov/altsa/dementia-action-collaborative

ADRC Contacts and Donation

- UW Alzheimer’s Disease Research Center: 206.744.0588
- Visit the UW ADRC website: uwadrc.org
- Visit the UW Memory and Brain Wellness Center website: www.depts.washington.edu/mbwc

Support the Alzheimer’s Disease Research Fund
Donations help support patient- and family-centered care, research breakthroughs in Alzheimer’s-type dementia and related disorders, and the training of tomorrow’s physicians. And by giving — perhaps in gratitude for care, or in memory of a loved one — you can help improve the lives of your friends, your family, and others in your region.

If you would like to be our partner in enhancing health and changing lives, please contact the UW Medicine Advancement Office at 206.543.5686. To donate online, please visit www.supportuwmedicine.org/adrc.

To ask questions or give feedback about Dimensions, please contact Genevieve Wanucha at gwanucha@uw.edu or 206.685.1304

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