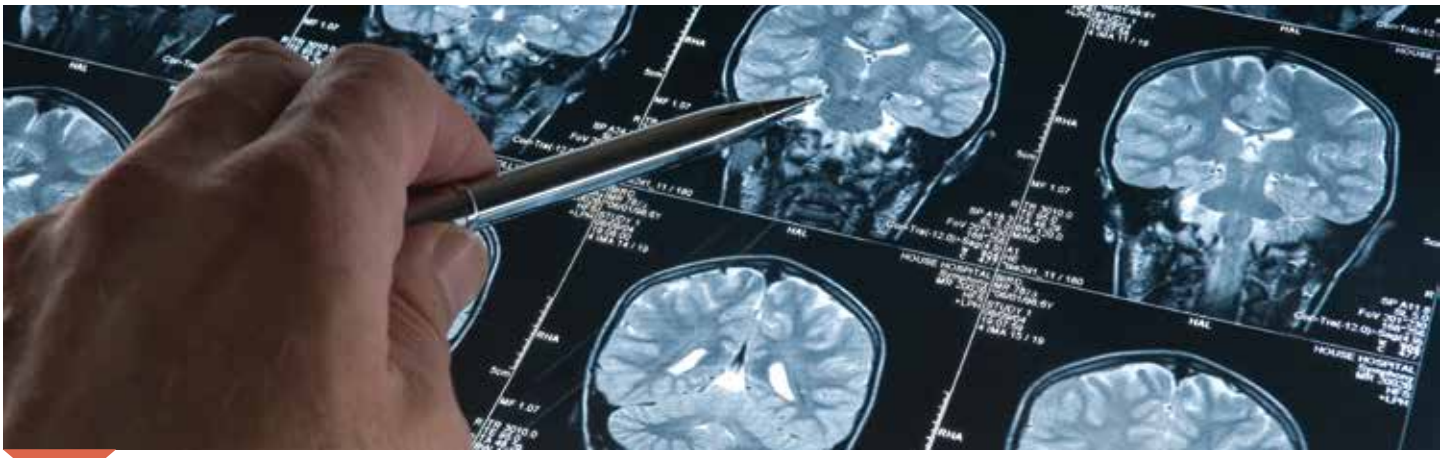
University of Pittsburgh Alzheimer Disease Research Center

Winter 2016–17

ADRC PATHWAYS

Moving Toward a Cure



ADRC Expands Imaging Techniques That Diagnose and Track AD

By Chester A. Mathis, Brian J. Lopresti, and William E. Klunk

As many of you know, Alzheimer's disease (AD) is characterized by the presence of two abnormal protein deposits in certain regions of the brain: amyloid-beta (Aβ) protein, which forms plaques, and tau protein, which forms neurofibrillary tangles (NFTs). The University of Pittsburgh Alzheimer Disease Research Center (ADRC) is world renowned for its pioneering brain imaging research that allows doctors to determine whether a person has Aβ plaques in his or her brain. Now, the ADRC is expanding its focus to study the detection of tau tangles.

AD Changes in the Brain

Upon an individual's death, a clinical diagnosis of AD is confirmed by neuropathologists who conduct an autopsy and count the Aβ plaques and NFTs in certain regions of the brain. Both of these abnormal deposits can now be imaged in the brains of living people

The goal of these imaging studies is to make early definitive diagnoses and to design trials to test drugs that prevent Aβ and tau buildup in the brain.

by using a brain imaging technique called positron-emission tomography (PET) along with special "tracers" specific to either Aβ or tau. In fact, the first successful Aβ tracer, Pittsburgh Compound-B (PiB), was developed more than 15 years ago at the University of Pittsburgh, aided by ADRC volunteers. More recently, successful tau tracers have been developed.

The time course of the spreading of Aβ plaques in the brains of living people has been the subject of considerable research over the past 15 years at the University of Pittsburgh and other research centers throughout the world. The recently developed tau tracers now allow analogous time course studies of NFTs. One of these new tau imaging compounds, AV-1451, has recently been introduced into human imaging research studies at Pitt.

Significance of Early Detection of AD Changes in the Brain

Elevated levels of Aβ are believed to be among the earliest markers of the AD

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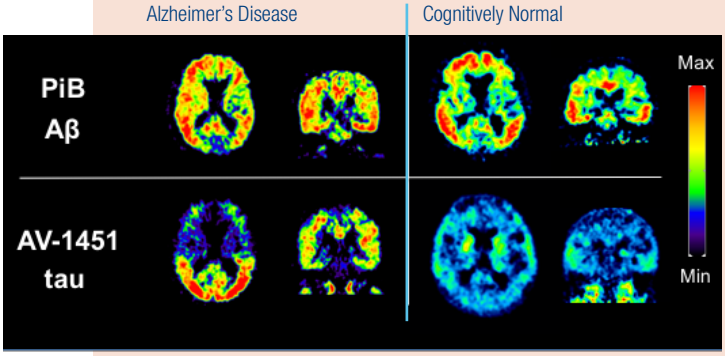
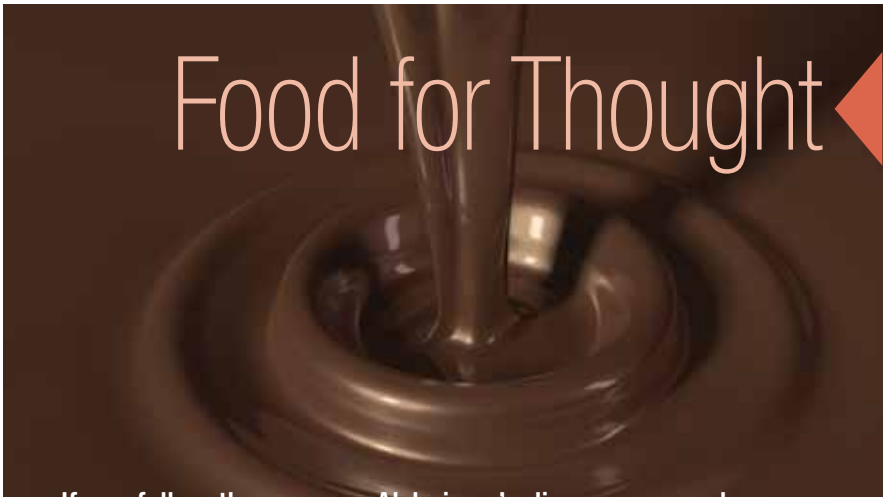


This photo shows representative PiB and AV-1451 PET images indicating amyloid-beta (Aβ) and tau deposits, respectively, in the brains of an Alzheimer's disease (AD) patient (left) and a cognitively normal patient (right). The PiB signal is seen in both patients because the normal patient is among the approximately 25 percent of the people who have Aβ deposits without symptoms. In contrast, the AV-1451 signal is significantly elevated in some brain regions of the AD patient, but in the cognitively normal patient, the AV-1451 signal has not yet begun to increase. These images support the hypothesis that Aβ plaques occur early in the AD process whereas tau deposits occur later in the process.

Food for Thought



If you follow the news on Alzheimer's disease research, you may have noticed that new findings on the relationship between nutrition and cognition seem to be reported every day. Food for Thought is designed to help you keep pace with this rapidly expanding area of research.

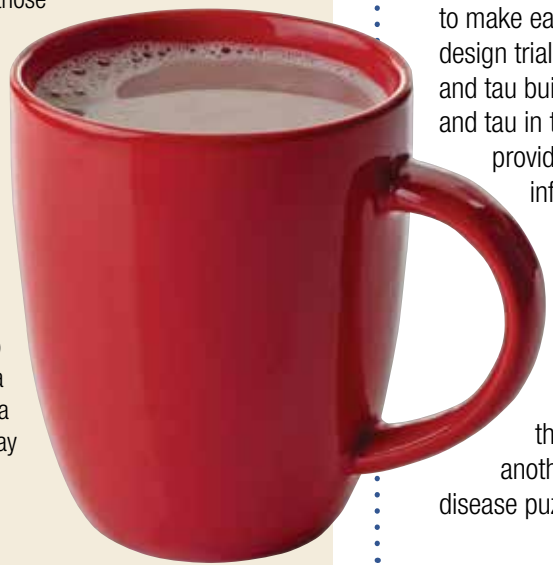
FEATURED STUDY: Farzaneh A. Sorond et al., "Neurovascular Coupling, Cerebral White Matter Integrity, and Response to Cocoa in Older People," *Neurology,* 81(10): 904–9, 2013.

WHAT THEY DID: Dr. Sorond's research team at Harvard University recruited 60 adults with an average age of 73 years who had high blood pressure and/or type 2 diabetes, both of which are vascular risk factors for dementia. These study participants were given cocoa powder in packets to be mixed with water and told to drink two cups of hot cocoa each day for 30 days. Participants underwent a series of blood flow and cognitive tests before and after the 30-day period of cocoa consumption.

WHAT THEY FOUND: There were no differences in blood flow or cognitive test performance in participants who had normal blood flow to the brain at the start of the study. However, after 30 days of cocoa consumption, participants who began the study with impaired blood flow to the brain were found to have faster speeds on a cognitive test called Trails B, which measures working memory. In addition, there was an 8 percent improvement in blood flow among those who had impaired blood flow to the brain at the start of the study.

WHY IT MIGHT WORK: People who have vascular conditions like high blood pressure and diabetes are at risk of reduced blood flow to the brain as they age. Foods, like cocoa, that improve blood flow in these high-risk populations may lead to better cognitive function.

THE BOTTOM LINE: Although this evidence is too preliminary to recommend drinking hot cocoa as a way of preventing dementia, this research adds to a growing set of studies suggesting that chocolate may have a beneficial effect on brain health.



ADRC Expands Imaging Techniques That Diagnose and Track AD

Continued from page 1

process. As expected, imaging studies using PiB have shown that the Aβ plaque formation increases with age. Less expected was the finding that Aβ plaque buildup begins before AD can be clinically diagnosed, while memory and other thought processes remain intact. It has been suspected that Aβ levels in the brain change first and then tau levels change, and it is this combination of both proteins that leads to the subsequent decline in cognitive functioning and, eventually, the symptoms of AD. With the availability of both Aβ and tau imaging agents, the time courses and interactions of the two proteins can be tracked and studied in living people.

Aβ is considered to be a specific indicator of AD, while tau can be found in several related diseases. Aβ imaging seems to be a good early marker of impending AD, and tau imaging is a more robust predictor of the stage of the illness. An analogy might be to think of Aβ imaging as a route sign and tau imaging as a mile marker: Aβ imaging tells you what road you are on but not how far down the road you are. Tau imaging tells you how far down the road you are but not the exact road. Together, they provide a much more precise location.

The goal of these imaging studies is to make early definitive diagnoses and to design trials to test drugs that prevent Aβ and tau buildup in the brain. Imaging Aβ and tau in the brain over time will provide a means to gather this information throughout the entire brain and to closely monitor those brain areas believed to be important in the sequential progression of AD. The ADRC is currently conducting a tau imaging study. We are hopeful that the data we gather will add another piece to the Alzheimer's disease puzzle.

How to Cope with Hallucinations and Delusions

As Alzheimer's disease (AD) progresses, a person with the disease may experience hallucinations, delusions, or paranoia. During a hallucination, the person sees, hears, smells, tastes, or feels something that isn't there. He or she also may have delusions—false beliefs that he or she thinks are real. Paranoia is a type of delusion in which a person may believe—without a good reason—that others are mean, lying, unfair, or "out to get" him or her. He or she may become suspicious, fearful, or jealous of other people.

Here are some tips for coping with a loved one's hallucinations and/or delusions.

• **Tell the person's doctor** or AD specialist about the hallucinations or delusions. Discuss with the doctor any other illnesses the person with AD has and any medications that he or she is taking. Sometimes an illness or medicine may cause hallucinations or delusions.

• **Try not to argue** with the person about what he or she sees or hears. Comfort the person if he or she is afraid.

• **Distract the person.** Sometimes moving to another room or going outside for a walk helps.

• **Turn off the TV** when violent or upsetting programs are on. Someone with AD may think these events are happening in the room.

• **Make sure the person is safe** and can't reach anything that could be used to hurt him- or herself, or anyone else.

In a person with AD, paranoia often is linked to memory loss. Paranoia can worsen as memory loss worsens. For example, the person may become paranoid if he or she forgets:

• **where he or she put something.** The person may believe that someone is taking his or her things.

• **that you are his or her caregiver.** Someone with AD might not trust you if he or she thinks you are a stranger.

• **people to whom he or she has been introduced.** He or she may believe that strangers will be harmful.

• **directions that you just gave.** The person may think you are trying to trick him or her.

Paranoia also may be the person's way of expressing loss. The person may blame or accuse others of misplacing something because no other explanation seems to make sense. Here are some tips for coping with paranoia.

• **Try not to react** if the person blames you for something.

• **Don't argue with the person.**

• **Let the person know that he or she is safe.**

• **Use gentle touching or hugging** to show that you care.

• **Explain to others** that the person is acting this way because he or she has AD.

• **Search for things to distract the person,** then talk about what you found. For example, talk about a photograph or keepsake.

Also, keep in mind that someone with AD may have a good reason for acting a certain way, and he or she may not be paranoid. There are people who take advantage of weak and elderly people. Find out if someone is trying to abuse or steal from the person with AD.

Paranoia is a type of delusion in which a person may believe—without a good reason—that others are mean, lying, unfair, or "out to get" him or her. He or she may become suspicious, fearful, or jealous of people.

(Information for this article was obtained from the Alzheimer's Disease Education and Referral Center fact sheet "Alzheimer's Caregiving Tips: Hallucinations, Delusions, and Paranoia.")

Outreach Happenings

James T. Becker, PhD, at the Kaufmann Center in Pittsburgh's Hill District

The University of Pittsburgh Alzheimer Disease Research Center (ADRC) outreach staff members have been very active over the past few months. Key accomplishments include forming new partnerships with the Urban League of Greater Pittsburgh and the Housing Authority of the City of Pittsburgh as well as organizing and delivering the center's semiannual Walter Allen Memorial Lecture.

Partnering with the Urban League gave the ADRC the opportunity to do a presentation for the Urban League's senior workers and host a table at the organization's annual Thanksgiving Distribution.

The most recent Walter Allen Memorial Lecture took place on October 20 in the Kaufmann Center at the Hill House Association. Guest speaker James T. Becker, PhD, director of the ADRC Neuroimaging Core, captivated the audience with a hands-on ribbon connecting activity that showed how scientists are changing the way people think about communication between one area of the brain and the next.

Partnering with the Urban League gave ADRC the opportunity to do a presentation for the Urban League's senior workers and host a table at the organization's annual Thanksgiving Distribution.

Learn about upcoming community outreach activities by clicking on Events under the News tab at www.adrc.pitt.edu. If you are affiliated with a community organization that would like to hear more about brain health, memory loss, or Alzheimer's disease research, contact MaryAnn Oakley at 412-692-2721.

Saxton Honored for Groundbreaking Dementia Care Research

Judith Saxton, PhD, adjunct professor of neurology at the University of Pittsburgh Alzheimer Disease Research Center (right), is congratulated by Leslie Dunn, MPH, center administrator (left), on her receipt of the Samuel K. McCune Award for Distinguished Service from Presbyterian SeniorCare Network. Dr. Saxton was honored for her groundbreaking research showing the effectiveness of the Woodside model of dementia care, an innovative, holistic approach that Presbyterian SeniorCare Network introduced 25 years ago. Dr. Saxton's expertise was instrumental in helping the Presbyterian SeniorCare Network team to evaluate care models and programming, which led to the creation of Woodside Place of Oakmont, one of the nation's first residential dementia-specific communities of its kind and that has been replicated more than 70 times since its inception in 1991. The video produced by Presbyterian SeniorCare Network honoring Dr. Saxton's accomplishments can be viewed at **https://youtu.be/FTne-ig0530.**

Ask the Medical Professional

By Oscar Lopez, MD, Director, University of Pittsburgh Alzheimer Disease Research Center

Q: What causes Alzheimer's disease?

A: Aging is the greatest known risk factor for developing Alzheimer's disease. Scientists do not yet fully understand what causes it. In a very rare form of early-onset Alzheimer's (symptoms starting in the 40s and 50s), a single genetic mutation is almost always the cause. Late-onset Alzheimer's, which is far more common, is due to a complex series of brain changes that occur over decades before memory and other cognitive problems appear. During this early time frame, people seem to be symptom free, but toxic changes are taking place in the brain. The overall causes of Alzheimer's are believed to include a combination of genetic, environmental, and lifestyle factors. Right now, there is a great deal of interest in the relationship between cognitive decline and vascular conditions such as heart disease, stroke, and high blood pressure as well as metabolic conditions such as diabetes and obesity. Ongoing research will help us understand how reducing risk factors for these conditions might also reduce the risk of Alzheimer's.

Q: What treatments are currently available for Alzheimer's?

A: Presently there, is no cure for Alzheimer's disease and there is no single drug or other intervention that can successfully treat it. Current medications help people maintain mental function, manage behavioral symptoms, and slow or delay the symptoms of disease. To date, there are several medications approved by the U.S. Food and Drug Administration to treat the symptoms of Alzheimer's. These drugs work by regulating neurotransmitters, which are the chemicals that transmit messages between neurons. They might help maintain thinking, memory, and communication skills and help with certain behavioral problems. However, these drugs do not change the underlying disease process. It is important to know that since 2003, we have not had any new treatment for Alzheimer's disease.

Q: What is the current research into understanding this disease and developing novel therapies?

A: Alzheimer's disease research has developed to a point where we can look beyond treating symptoms and think about addressing the underlying disease processes. The Alzheimer Disease Research Center (ADRC) at the University of Pittsburgh is one of the nation's leading research centers specializing in the diagnosis of Alzheimer's and related disorders. The ADRC has supported more than 50 research projects investigating various aspects of Alzheimer's disease. Research ranges from genetic and biochemical studies to investigations of behavioral changes and the burden placed on caregivers of Alzheimer's disease patients. The ADRC is conducting multiple industry and federally funded clinical trials using symptomatic and disease-modifying treatments. The majority of the trials are oriented to reduce the deposits in the brain of a protein called amyloid-beta, which plays a central role in the development of the disease. These are called disease-modifying treatments because they can alter the underlying biology of the disease. In addition, the ADRC is participating in one of the largest prevention trials in the country called A4. This study is funded by Eli Lilly and Company and the National Institute of Aging and consists of the use of anti-amyloid therapy in individuals who are cognitively normal, but who have amyloid deposits in the brain. Research is also under way to develop a test that may predict or diagnose the disease definitively. Researchers hope to identify a blood-based biomarker of Alzheimer's that may lead to blood tests in the future to diagnose the disease at its earliest stage and better track its progression.

Q: What can people do to reduce their risk of developing Alzheimer's?

A: A nutritious diet, physical activity, social engagement, and mentally stimulating pursuits have all been associated with helping people stay healthy as they age. These factors may also help reduce the risk of cognitive decline and Alzheimer's disease. In fact, a study authored by researchers from the University of Pittsburgh showed that cognitively normal individuals who walked more than 72 blocks per week had larger brain volumes than those who walked less and, over a five-year follow-up period, had a decreased risk of developing dementia. These results showed a direct connection between exercise and delaying cognitive impairment. As current treatments for Alzheimer's disease are limited and only address the symptoms, identifying innovative prevention strategies, such as regular exercise regimens, will be paramount.

(This article is excerpted with permission from the article "Alzheimer's Awareness: Q&A with Dr. Oscar Lopez," which appeared in the November 2016 issue of *The Sharon Herald, Views & Voices.*)

Join a Caregiver Support Group

By Suzanne Weessies, Constituent Services Coordinator, Alzheimer's Association, Greater Pennsylvania Chapter

In Pennsylvania, there are more than 670,000 spouses, children, partners, family members, and friends providing care for loved ones living with Alzheimer's disease (AD).

Despite the fact that so many families are touched by this terrible disease, caregivers often feel alone in their journey and report that even their closest friends, siblings, and spouses don't truly understand how complicated, unpredictable, and exhausting it is to care for someone with dementia.

The Alzheimer's Association, Greater Pennsylvania Chapter, housed locally in downtown Pittsburgh, works to connect caregivers with others who are dealing with similar issues by offering more than 50 caregiver support groups at community locations throughout 12 counties in Southwestern Pennsylvania.

Alzheimer's Association-affiliated caregiver support groups meet once a month and are offered in person, over the phone, and even online. They are attended by caregivers of all ages and in all types of relationships with a person with dementia. Caregiver support groups are open to caregivers of those with any type of dementia, not just Alzheimer's disease, as well as to caregivers who live with their loved one, live across town, or live across the country.

Caregiver support groups bring together individuals in similar circumstances and offer them a safe, confidential space in which to share their feelings as well as give and receive advice on things like adapting to stress, problem solving, managing difficult behaviors, and remembering to find joy in the small things. They also provide practical community resources and access to professional education about the disease.

To find a caregiver support group within or outside Allegheny County or if you have questions about support groups or any other caregiving concerns, please call the Alzheimer's Association, Greater Pennsylvania Chapter, at 412-261-5040, extension 3112, or the 24/7 Alzheimer's Association Helpline at 1-800-272-3900. You also can find support group listings at communityresourcefinder.org.

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ALLEGHENY COUNTY CAREGIVER SUPPORT GROUPS

For more information or to find other group locations, call 1-800-272-3900 24/7 or 412-261-5040, extension 3112, Monday–Friday from 8:30 a.m. to 4 p.m.

ASPINWALL/FOX CHAPEL

Concordia of Fox Chapel
931 Route 910
Last Thursday of every month, 1 p.m.

UPMC St. Margaret
815 Freeport Road
First Floor, Conference Room A
Third Monday of every month, 7 p.m.

BETHEL PARK/MT. LEBANON

Asbury Heights
700 Bower Hill Road
Third Monday of every month, 2:30 p.m.

Home Instead Senior Care
1500 Oxford Drive, Suite 150
First Saturday of every month, 10 a.m.

Prime Time Adult Day Center
Christ United Methodist Church
44 Highland Road, Room 29
Third Wednesday of every month, 7:30 p.m.

The Pines of Mt. Lebanon
1537 Washington Road
Second Wednesday of every month, 6:30 p.m.

Westminster Presbyterian Church
2040 Washington Road
Fourth Thursday of every month, noon

BRIDGEVILLE

Country Meadows
3560 Washington Pike
Second Sunday of every month, 2 p.m.

Broadmore Assisted Living
3275 Washington Pike
First Thursday of every month, 6 p.m.

FOREST HILLS

Juniper Village
107 Fall Run Road
Second Wednesday of every month, 1:30 p.m.

HILL DISTRICT

Alzheimer's Outreach and Resource Center
Hill House Association
1835 Centre Avenue
Last Tuesday of every month, 6 p.m.

MCKEESPORT

UPMC McKeesport Aging Institute Community Resource Center
First Floor, Crawford Building
1500 Fifth Avenue
Second Friday of every month, 1 p.m.

MOUNT WASHINGTON

Sweetbriar Place
211 Sweetbriar Place
Third Thursday of every month, 5:30 p.m.

NATRONA HEIGHTS

Allegheny Valley Hospital
1301 Carlisle Street
Charles Young Conference Room A and B
Last Wednesday of every month, 7 p.m.

OAKMONT

Presbyterian SeniorCare Woodside Place
1215 Hulton Road
Fourth Tuesday of every month, 3 p.m.

Presbyterian SeniorCare Longwood at Oakmont
500 Route 909
Third Monday of every month, 2 p.m.

SEWICKLEY

St. Stephen's Anglican Church
Henning House
405 Frederick Avenue
Second Monday of every month, 10:30 a.m

SOUTH PARK

Mt. Vernon of South Park
1400 Riggs Road
Last Wednesday of every month, 7 p.m.

SQUIRREL HILL

Jewish Family & Children's Service of Pittsburgh
5743 Bartlett Street
Third Thursday of every month,
1:30 p.m.

WILKINS TOWNSHIP/PENN HILLS

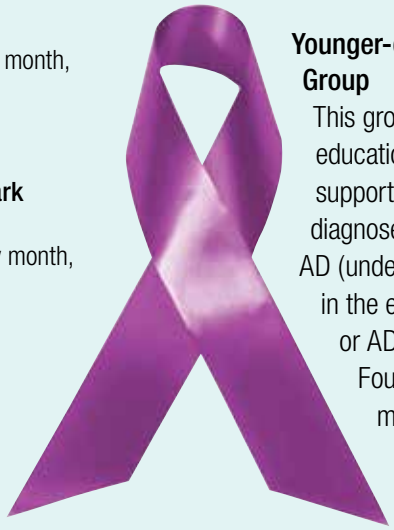
Beulah Presbyterian Church
2500 McCrady Road
Second Monday of every month, 7:30 p.m.

EARLY STAGE TELEPHONE SUPPORT GROUPS

Registration is required. Call 412-261-5040, extension 3112.

Alzheimer's Association telephone support groups provide emotional, educational, and social support for individuals living in the early stages of Alzheimer's disease or a related dementia and their care partners. Held via telephone conference call, these groups help participants to develop coping methods and encourage ongoing personal, physical, and emotional health.

Early Stage Education Group
This group is designed to provide educational information and support to those living in the early stages of dementia or AD.
Third Wednesday of every month, 11 a.m.



Younger-onset Early Stage Group
This group is designed to provide educational information and support to those who have been diagnosed with younger-onset AD (under age 65) and are living in the early stages of dementia or AD.
Fourth Thursday of every month, 1 p.m.

Early Stage Care Partners Group
This group is designed to provide educational information and support to care partners with loved ones living in the early stages of dementia or AD.
Fourth Thursday of every month, 1 p.m.

GOOGLE HANGOUTS GROUP FOR CAREGIVERS UNDER 40

Registration is required. Call 412-261-5040, extension 3112.
Please call for more information on this interactive online group designed to meet the unique needs of people under the age of 40 who are navigating their way through this disease while attending school, raising families of their own, or developing careers.
Second Wednesday of every month, 7 p.m.

With Gratitude

The University of Pittsburgh Alzheimer Disease Research Center thanks the following individuals and organizations for their generous donations received between May 14 and November 30, 2016.

In Memory of

Thomas Abbey
- Susan Schildt
- Lauren Sirbak
- U.S. Probation Sunshine Club

Michael A. Benedict
- Kathleen Benedict
- Stephen Benedict
- Ronald and Nancy Donovan
- James and Linda Ludwig
- Samuel and Kerry Mastovich
- William and Jane Mather

Helen Bindas
- Norma Jean Schweibinz

Sophie Borello
- Mr. and Mrs. Jack B. Allen Jr.
- Bill and Rose Stevenson
- A.O. Wing & Associates

Robert S. Bowman, PhD
- Alice K. Bowman

Joanne Carozza
- Eugene and Janet Graham

Kathleen Conley
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- Ronald and Lorayne Koch
- Wilson and Lydia Sturgeon
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- Gerald and Stephanie Fenton
- James Waldemarson

Evelyn Louise Pecsenye
- Zachary A. Aria

Wayne Schuetz
- "Team Wayneman" for the Alzheimer's Walk held October 15, 2016
- Sandra Burt
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- Dennis and Clare Pawloski
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Memory Finders—An annual fundraiser held by Jason and Leslie Baker
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In Memory of Lori DeMoe McIntyre
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Erven and Sandra Neilsen
Carl and Judy Reid
Sarah Jane Wolf

The Bernard and Ethel Lazar Research Fund
In Honor of Dale Lazar's Birthday
Rebecca Markowitz

The Betty Lou Yount Trust Fund

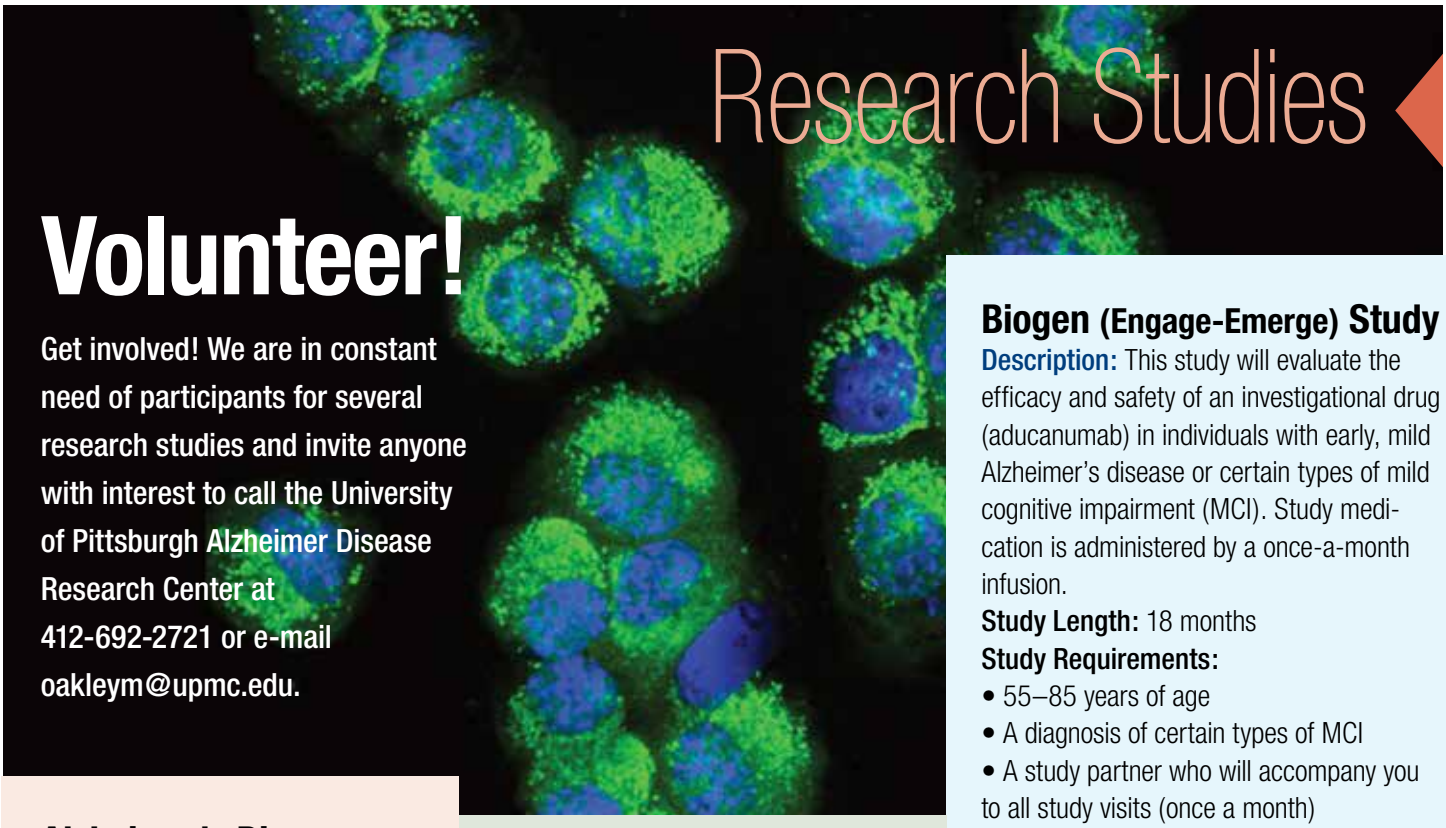
Thank you!

Your contributions are greatly appreciated and help to support research and education in the area of Alzheimer's disease. You can remember or honor a loved one by using the envelope enclosed in this newsletter to send in your donation.

If you no longer wish to receive issues of *Pathways,* please contact MaryAnn Oakley at 412-692-2721 or oakleym@upmc.edu.

Warhol Tour and Artistic Expression Activity Offered in March

The Alzheimer Disease Research Center and the Andy Warhol Museum of Pittsburgh have partnered to offer a new and innovative program for patients and family members affected by memory loss and other cognitive changes. Patients and their family members are invited to participate in a Warhol tour and artistic expression activity offered at the Andy Warhol Museum on Pittsburgh's North Side. The next program will be held on March 9, 2017, from 10 a.m. to 12:30 p.m. Please contact MaryAnn Oakley at 412-692-2721 or oakleym@upmc.edu for more information or to register for this event.



Research Studies

Volunteer!

Get involved! We are in constant need of participants for several research studies and invite anyone with interest to call the University of Pittsburgh Alzheimer Disease Research Center at 412-692-2721 or e-mail oakleym@upmc.edu.

Alzheimer's Disease Neuroimaging Initiative 3 (ADNI3) Study

Description: The overall goal of this study is to determine the relationships among the clinical, cognitive, imaging, genetic, and biochemical biomarker characteristics of the entire spectrum of Alzheimer's disease (AD) from its earliest stages. Subjects will undergo longitudinal clinical and cognitive assessments, computerized cognitive batteries, biomarker and genetic tests, PET (FDG, amyloid, and tau) and MRI scans, and cerebrospinal fluid collection.

Study Length: Up to five years

Study Requirements:

- 55–90 years of age
- Normal cognition or a diagnosis of mild cognitive impairment or AD
- A study partner who will accompany you to all study visits

Contact: MaryAnn Oakley at 412-692-2721 or oakleym@upmc.edu

A4 Study

Description: The Anti-Amyloid Treatment in Asymptomatic Alzheimer's (or A4) Disease Study is among a new generation of clinical trials being developed to test therapies that might prevent, or at least delay, the onset of Alzheimer's disease in cognitively normal people who may be at risk, as evidenced by a PET scan.

Study Length: Three years

Study Requirements:

- 65–85 years of age
- Normal thinking and memory abilities
- A study partner who has contact with you at least once a week and who can answer questions about you once a year (contact may be in person or by phone)
- Willingness and ability to receive intravenous infusions of the investigational treatment (solanezumab) or a placebo every four weeks for three years

Contact: MaryAnn Oakley at 412-692-2721 or oakleym@upmc.edu

Biogen (Engage-Emerge) Study

Description: This study will evaluate the efficacy and safety of an investigational drug (aducanumab) in individuals with early, mild Alzheimer's disease or certain types of mild cognitive impairment (MCI). Study medication is administered by a once-a-month infusion.

Study Length: 18 months

Study Requirements:

- 55–85 years of age
- A diagnosis of certain types of MCI
- A study partner who will accompany you to all study visits (once a month)

Contact: Carolyn Rickard at 412-692-2707 or mishlercj@upmc.edu or MaryAnn Oakley at 412-692-2721 or oakleym@upmc.edu

Connectomes in Brain Aging Study

Description: This study will determine how different parts of the brain are connected and how these connections allow people to think, behave, and feel. The study will involve two to three days of scanning and tests. Some participants will be asked to return after two years for additional tests.

Study Length: Two to three days for all participants; two years for some participants

Study Requirements:

- 50–89 years of age
- Normal cognition or a diagnosis of mild cognitive impairment or Alzheimer's disease

Contact: MaryAnn Oakley at 412-692-2721 or oakleym@upmc.edu or Rebecca Roush at 412-586-9860

Staff Spotlight

Cary L. Zik

We extend a warm welcome to our newest employee, Cary L. Zik.

In her position as a neuropsychometrist, Zik is responsible for administering neuropsychological test batteries, scoring tests, and entering data. Neuropsychological tests are specifically designed and used to measure a certain psychological function that is known to be linked to a particular brain structure or pathway.

Prior to joining the ADRC, Zik worked for the University of Pittsburgh Monongahela Valley Independent Elders Survey; the University of Pittsburgh Center for Healthy Aging in McKeesport, Pa.; and the Aging Institute of UPMC Senior Services and the University of Pittsburgh.

Zik graduated from the University of Pittsburgh in 1998 with a BA in sociology. She also earned an Associate of Science degree in business management at the Community College of Allegheny County in 1995.

"I think that working toward a better understanding of memory changes and meeting and working with wonderful people, both participants and staff members, are the most rewarding parts of my job," says Zik.

In her spare time, Zik enjoys reading, listening to music, and spending time with her family.

Welcome to ADRC

Dr. Renã Robinson Joins ADRC Faculty

The University of Pittsburgh Alzheimer Disease Research Center (ADRC) is pleased to announce the appointment of Renã Robinson as associate director of outreach, recruitment, and education. Dr. Robinson is an assistant professor in Pitt's Department of Chemistry. Her research applies the cutting-edge techniques of mass spectrometry and proteomics to examine physiological mechanisms associated with health disparities in aging and Alzheimer's disease (AD).

Dr. Robinson has a BS in chemistry from the University of Louisville and a PhD in analytical chemistry from Indiana University Bloomington. She came to Pitt in 2009 after completing a postdoctoral fellowship in biochemistry at the University of Kentucky. In addition to running a highly successful scientific laboratory, Dr. Robinson is passionate about raising public awareness of AD and increasing minority representation in research. Over the past two years, she has collaborated with Dr. Jennifer Lingler on several outreach initiatives, including serving as the featured speaker in 2016 at a Black History Month event jointly hosted by ADRC's Alzheimer's Outreach & Resource Center and the Alzheimer's Association, Greater Pennsylvania Chapter, and developing the Brain Fitness Boot Camp for use in the Pitt Mobile Science Lab, which visits local neighborhoods, schools, and community events. In her new position, Dr. Robinson will continue and expand upon current collaborations to strengthen the ADRC. Please join us in extending a warm welcome to Dr. Robinson.

University of Pittsburgh
Alzheimer Disease Research Center
UPMC Montefiore
Suite 421 West
200 Lothrop Street
Pittsburgh, PA 15213-2582

Web **www.adrc.pitt.edu**

ADRC PATHWAYS
is published as a service of the University of Pittsburgh Alzheimer Disease Research Center.

412-692-2700

The University of Pittsburgh is an affirmative action, equal opportunity institution. Published in cooperation with the Department of Communications Services. DCS110216-0117