I am honored to report that Dr. Jeff Kaye and the Layton Center team has asked me to serve as the new director of Outreach, Recruitment and Education. As many of you know, Dr. Linda Boise held this position for the last two decades. I assumed the role in August of this year after Dr. Boise retired. It is somewhat daunting to be in this position — Dr. Boise has left a legacy of community engagement, quality research and meaningful outreach. I aim to continue to build on this strong foundation.

I came to the Layton Center in 2013 after completing my Ph.D. in gerontological nursing at OHSU. As an experienced nurse practitioner (N.P.), I started my career in San Francisco, where I completed my masters in cross-cultural nursing at UCSF. My husband (David Spencer, a seizure specialist here at OHSU) and I moved up to Oregon when David took his position at the epilepsy center.

Over the years I have truly enjoyed working as an N.P., first in internal medicine, and now here. Currently, I see patients in our Aging and Alzheimer’s disease clinic. With my Ph.D., I am now able to engage in research that explores caregiver coping and telemedicine. This has been an important life goal for me and it is wonderful to be fully engaged in work that I love.

As director, I will tap into my experience to support and expand our program. I will continue the Layton Center’s work with PreSERVE (a community coalition that serves older African Americans), as well as with other community groups. I will reinvigorate our work with Oregon’s rural residents and support the OHSU School of Medicine’s medical student education program in dementia care. And of course, I will fully explore how telemedicine can be used to meet the needs of the over 62,000 Oregonians with Alzheimer’s disease and their caregivers.

When we’re not on campus, David and I can be found helping our busy teenagers manage their complex schedules, walking our tireless Australian Shepherd or playing a game of cribbage on a quiet evening. We are so happy to have roots in Portland and I look forward to deepening my commitment to the evolution of the Layton Center.

As director, I will tap into my experience to support and expand our program.
OHSU researchers are working to understand how telemedicine (video chat technology, much like Skype) can be used to help caregivers for people with dementia, and we are looking for family caregivers to help us.

Study participation involves:

• One preliminary telemedicine visit with the OHSU study team.
• Eight visits to learn the STAR-C program for managing challenging dementia behaviors. These visits will be in your home via telemedicine (clinicians will connect with you over the internet on your computer).
• Two monthly phone calls.
• Optional participation in a focus group.

You may be eligible to participate if:

• You are a caregiver for a person with Alzheimer’s or a related dementia.
• Your family member has three or more bothersome behaviors (for example, asking the same question over and over, pacing, or refusing help with personal care).
• You or your family member have a computer with a reliable internet connection.

You may be eligible to receive a $25 Fred Meyer gift card if you complete the required components of the study.

The Layton Aging & Alzheimer’s Disease Center currently has clinical trials for people with mild cognitive impairment, early stage Alzheimer’s disease and those without any symptoms of memory loss but are at risk for developing it. If you would like information about our current trials and research participation opportunities at the Layton Center please call our research team at 503-494-7647 or email adresearch@ohsu.edu.

ACTNOW!

The Northwest community is joining hands to increase high-quality Alzheimer’s research. If you are interested in being a study participant or if you would just like to keep up to date on Alzheimer’s research, consider becoming a member of the ACTNOW! community. ACTNOW! members receive a quarterly bulletin highlighting local Alzheimer’s research and receive invitations to ACTNOW! gatherings where participants can, either in person or online, attend presentations on Alzheimer’s research. If you have questions about becoming an ACTNOW! member, contact the ACTNOW! coordinator at actnow@ohsu.edu or visit www.alzactnow.org.
The role of neuropsychological examination in dementia care

Kathy Wild, Ph.D.

Dr. Kathy Wild has been providing neuropsychological evaluations at the Layton Aging & Alzheimer’s Disease Center for over 25 years.

When a patient is seen at the Layton Aging & Alzheimer’s Disease Center, their neurologist may refer them for a neuropsychological examination. The purpose of such a referral can be one of many: for help with diagnosis, patient care and planning, tracking patterns of changes in thinking over time, or some combination of these. But from the patient’s and family’s point of view, the reason for this evaluation and the actual procedures involved are not always clear.

There can be uncertainty about whether the memory lapses, difficulty finding the right word, or concentration problems that a person is experiencing are part of normal aging or signs of a disease process. Sometimes it is clear that a person is experiencing significant changes in thinking, but a better understanding of their impairments might help clarify the diagnosis. Other times, it is simply helpful for the patient and family to have objective evidence of strengths and weaknesses in order to make daily life as fulfilling and enjoyable as possible. Finally, repeat evaluations can track the progression of problems in memory or thinking and help with future care planning.

Let’s take a look at what happens once an appointment for a neuropsychological examination is made. At the Layton Aging & Alzheimer’s Disease Center, the neuropsychological evaluation generally takes between two to three hours. This includes interviews with the patient and family as well as the tests themselves. When we talk about neuropsychological tests, what we are describing is a set of activities that represent standardized tests of specific brain functions. These tests have been given to hundreds if not thousands of people to determine what is “normal” or “average” for people of different ages. They are not tests in the sense of pass/fail; no one “fails” a neuropsychological evaluation! But what they do provide is more specific information about abilities in different kinds of mental activity. For example, what one person may experience as a memory problem may turn out to be a difficulty with attention. Visual spatial difficulties are sometimes hard to describe, but can be identified during a comprehensive examination. Problems with word finding are common in older adults, but a failure to understand the meaning of words might signify a disease process.

Once the examination is complete, the findings are reviewed with the patient and family, and strategies for dealing with any identified impairments are discussed. At its best, a neuropsychological examination is simply the start of a conversation about how to provide the best possible care for patients with memory problems or dementia.
Cognitive health may be due in part to leading a physically active and socially engaged lifestyle. Portland neighborhoods are great for that. But what if you no longer recognized yours? What if your friends’ homes, your church, corner store, beauty shop, and favorite eating spots were replaced by top-market condos, pricey boutiques and upscale groceries and cafés? Imagine passing by real estate offices displaying hefty price tags for the homes of your neighbors of 30 years. For some older African Americans living in North and Northeast Portland, neighborhood walking in the face of gentrification hasn’t been a particularly motivating prospect.

The Sharing History through Active Reminiscence and Photo-imagery (SHARP) Pilot Program aims to increase walking and social engagement among older African Americans, who may be at higher risk for cognitive decline, including Alzheimer’s, because of higher rates of chronic conditions like diabetes and hypertension that impact brain health. SHARP’s 21 African Americans (aged 55+) walk three times a week in teams of three. Teams follow GPS-mapped routes on a tablet and view three historic neighborhood images to stimulate conversational reminiscence about living in Portland’s historically Black neighborhoods from 1940–2010. Participants’ recorded narratives will be integrated into educational programming that uses community memory to engage African Americans in learning about memory and brain health as we age.

Two groups have completed SHARP’s six-month program; five groups are currently walking. In focus groups, participants reported increased social engagement in and outside the program, and that neighborhood walking makes them feel visible when gentrification makes them feel invisible. Participants feel that recording their community memories is at once meaningful and motivational: The incentive to walk is for me tied to a purpose. It is about getting the exercise and social engagement — all of that — but the historic piece, looking at what was and what is now community — having a purpose involved in the walks — is important to me.

Portland-born Assistant Professor Raina Croff, Ph.D., leads the SHARP program with support from Drs. Jeffrey Kaye, Linda Boise and Hiroko Dodge of OHSU’s Layton Aging & Alzheimer’s Disease Center. The team hopes to expand SHARP to include people experiencing mild cognitive impairment and limited mobility, and to other neighborhoods across the country.

SHARP is funded by the CDC’s Prevention Research Center and the CDC Healthy Brain Research Network, and by the Oregon Roybal Center for Aging and Technology. Images courtesy of (in order shown) Family of Shoshana Maxwell (first image), Oregon Historical Society (second image, top row on the right), Raina Croff (bottom, last image).
Oregonians directly impacting research through donations

Natasha Spoden, M.S.
Senior research assistant,
Layton Aging & Alzheimer's Disease Center

The Oregon Partnership for Alzheimer’s Research (OPAR) is pleased to announce the 2016 research grants from the Oregon Tax Checkoff Alzheimer’s Research Fund have been awarded to Johanna Austin, Ph.D., and Arpita Ray, Ph.D., both postdoctoral fellows in the Department of Neurology, OHSU.

Dr. Austin’s study, *Internet searches as an early detection system for cognitive decline*, will examine the relationship between cognitive function and computer use, including internet searches and leisure activities such as computer games and social communications. Commercially available computer monitoring software will be used to unobtrusively measure computer activity. Data to be analyzed will come from 77 participants who have consented to have this software installed on their personal computers as part of the Oregon Center for Aging & Technology (ORCATECH), a center directed by Dr. Jeffrey Kaye at OHSU.

Dr. Ray’s study, *Investigating the neuroprotective role of the glial engulfment receptor draper/MEGF10 in Alzheimer’s disease*, will combine research with drosophila, a fly species that is used to study pathologies found in Alzheimer’s disease in humans, and study of human tissue. This work will provide insight into innate immune responses at the molecular level in the context of the AD brain.

These funds have been made available by Oregonians through the Oregon Income Tax Charitable Checkoff Program created by the Oregon legislature. Grants may be awarded to clinical, basic or social scientists for support of research that will advance the understanding, treatment or prevention of Alzheimer’s disease. Potential fields for research include the basic neurosciences, genetics, nursing, social work, epidemiology, sociology, psychology, psychiatry, public health, economics, counseling, delivery of health care services, and others relevant to Alzheimer’s research or practice.

This research granting program is organized through the OPAR, a community advisory committee, and administered by the Layton Aging & Alzheimer’s Disease Center at OHSU. The mission of OPAR is to foster the development of promising research on Alzheimer’s disease in Oregon. Priority for funding is given to investigators just entering the field of dementia research. Applicants may be investigators in Oregon who are launching their careers including senior graduate students (for doctoral dissertation research), fellows and junior investigators.

For information about this program, contact Allison Lindauer, lindauer@ohsu.edu, 503-494-6370.

More than 62,000 Oregonians have Alzheimer’s disease. You can help.

When filling out your tax return this year, please check the designated box to donate a portion of your state tax return to fighting Alzheimer’s disease.

Every dollar of Tax Checkoff donated funds goes to researchers in Oregon. Funds are administered through OHSU under the direction of Oregon Partnership for Alzheimer’s Research.

For more information visit [www.ohsu.edu/alzcheck](http://www.ohsu.edu/alzcheck).
Everyday cognition

Dr. Adriana M. Seelye, Ph.D.
Assistant Professor of Neurology, Oregon Health & Science University; Co-Investigator, Oregon Center for Aging & Technology; Assistant Professor of Psychiatry, University of Minnesota; Staff Neuropsychologist, Minneapolis VA Health Care System

Dr. Adriana Seelye, an Investigator at the Oregon Center for Aging & Technology (ORCATECH) at Oregon Health & Science University (OHSU), serves as principal investigator on several nationally and regionally funded grants for studies focused on everyday cognitive assessment of older adults using in-home and mobile activity monitoring technologies. She is a recipient of an Oregon Partnership for Alzheimer’s Research (OPAR) research grant, and is carrying out a pilot study to explore how monitoring the driving patterns of older adults can be used as a tool for measuring brain health. Frequency, time of day, routes traveled and amount of time spent driving are being unobtrusively tracked in a small sample of seniors for 12 months. Results from this study will help researchers and clinicians understand how changes in routine driving habits as people age may be related to risk for developing dementia. Having reliable and noninvasive tools that can identify abnormal brain changes as early as possible will be critical for effective treatment of AD. Dr. Seelye is also a recipient of a national Alzheimer’s Association New Investigator Research Grant, and is carrying out a pilot study to explore how monitoring patterns of routine home computer use and telephone use can be used as a practical, noninvasive tool to monitor and track brain health in seniors. Receiving grant support from OPAR and the Alzheimer’s Association has provided Dr. Seelye with the opportunity to gather promising preliminary data that will be used to support larger grant applications for continued research in this exciting area of aging and dementia research. In anticipated future studies, Dr. Seelye plans to recruit a larger sample of older adults to participate in a longitudinal study of in-home and mobile assessment in the areas of computer use, driving and medication taking. Another area of research interest for Dr. Seelye is developing telehealth-based neuropsychological assessment models targeted to older adults residing in rural communities, with the goal of improving early detection of cognitive decline and access to services for those seniors.

Thank you to everyone who contributes through their tax return to the Oregon Partnership for Alzheimer’s Research through the Oregon Tax Checkoff Program. You make research grants possible for junior researchers like Dr. Seelye.
The C. Rex & Ruth H. Layton Aging & Alzheimer’s Disease Center

The Layton Aging & Alzheimer’s Disease Center is one of 31 NIA Alzheimer’s Disease Centers in the United States and the only one of its kind in Oregon. Our center is recognized as a national leader in dementia care and research, and is committed to serving the needs of people throughout the Northwest.

The Layton Center is part of the OHSU Brain Institute (OBI). OBI is a national leader in neuroscience patient care, research and education.

Jeffrey Kaye, M.D.  
Executive director  
Layton Aging & Alzheimer’s Disease Center

Allison Lindauer, Ph.D., N.P.  
Director of Outreach, Recruitment, and Education (ORE) Core  
Layton Aging & Alzheimer’s Disease Center

Natasha Spoden, M.S.  
Research assistant, ORE Core  
Layton Aging & Alzheimer’s Disease Center

Matthew Rabin  
Charitable giving  
503-220-8340

Memory disorders:  
new diagnosis educational workshop

Join us the first Thursday of every month from 3 – 4:30 p.m. for a one-visit educational session for OHSU memory disorder patients and their family members. Park in the Center for Health & Healing parking lot and we can validate parking at the workshop.

For more information: 503-494-7615

Subscribe
To subscribe to the Layton Center’s newsletter, the Update, a biannual publication that features stories on Layton Center and national research, the experiences of volunteers in some of our studies, and cognitive health, call 503-494-6370.