Nobody has a perfect memory. At one time or another, most people forget where they put their keys, what they had for dinner three nights ago, or the name of a person whose face they recognize. These things happen to almost everyone because our brains do not function like computers, permanently storing the information as we want it stored. But where should the line be drawn between memory problems that are simply part of everyday forgetfulness, and those that are indicative of a more pernicious memory problem? Further, if a person does have a legitimate memory problem, how can the specific type of memory problem be determined?

In the process of diagnosing cognitive impairments and memory problems, geriatric health professionals often look for the signature symptoms of a disease or illness. This assists them in differentiating different types of memory problems. The aim of this article is to help define and differentiate some of the most common forms of cognitive impairment and memory problems by focusing on the signature symptoms of several conditions.

What is Dementia?

Dementia involves the loss of certain mental capacities like memory, language, decision making, attention, orientation, as well as spatial and motor skills. To qualify as a dementia, deficits must be severe enough to interfere with work and/or social life. An example of the presence of this kind of deficit might be a cab driver who can no longer work because she/he cannot read maps or remember the directions to certain locations anymore.

Dementia is a general term that encompasses many different forms of cognitive impairment and memory loss. To make a specific diagnosis such as Alzheimer’s disease (AD), Frontotemporal dementia (FTD), Vascular dementia (VaD), and dementia with Lewy Bodies (DLB), the clinician performing the diagnosis has to have enough evidence or information to be able to make such a diagnosis. So frequently the first term the patient and his family hears is “dementia” because the physician does not yet have sufficient evidence to be more precise. Simply put, dementia is not a specific type of cognitive impairment. Rather, it is a broad term to differentiate normal from abnormal cognition. The loss of certain cognitive capacities like memory, language, decision making, attention, and orientation distinguish the different forms of dementia.

Alzheimer’s Disease (AD)

Alzheimer’s disease is the most common cause of dementia. AD causes a progressive degeneration of certain brain cells, thus the effects of the disease gradually worsen as time passes. This progression is usually slow, so if a clinician sees that the memory problems an individual is experiencing have occurred slowly over a long period of time (often many months to several years), they will speculate that AD may be the cause. Besides a slow progression of memory loss, there are other markers of the disease but these are hidden

continued on p. 2
There are issues unique to individuals with memory changes and to their family members. We are trying to learn how to better address these issues by developing new services and providing support groups that meet the needs of individuals with memory problems and their families. We are involved in ongoing development of support groups to achieve these goals. Currently the following groups are available at our center:

**Caregiver & Family Support Group**

This group is designed to address individual questions and concerns. It also provides an opportunity for group members to develop a support network outside the group setting.

**Mild Cognitive Impairment (MCI):**

This ongoing group is for individuals diagnosed with MCI and their partners. The sessions focus on 1) education, 2) communication, 3) management, and 4) psychosocial concerns.

**Mild Cognitive Impairment (MCI) Support Group Effectiveness Project**

Designed for newly diagnosed persons with MCI and their care partners, this project aims to evaluate the effectiveness of support groups as a means of alleviating symptoms of depression and improving quality-of-life and relationships. Participants will attend ten support group meetings. They will then provide feedback regarding their experiences in a separate focus group session. The first phase of the study has been completed and announcements regarding recruitment for participants in the second phase will be made later this year.

**Educational Seminars**

These are monthly informational/educational seminars given by professional staff addressing a wide range of topics pertinent to memory loss, health and caregiver issues.

<table>
<thead>
<tr>
<th>All groups meet at</th>
<th>VA Palo Alto Health Care System</th>
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<tr>
<td></td>
<td>3801 Miranda Ave., Bldg. 6,</td>
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<tr>
<td></td>
<td>2nd floor Conference Room (C258)</td>
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<td>Palo Alto, CA 94304</td>
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For more information, please contact the Stanford/VA Alzheimer’s Research Center at (650) 858-3915 or online at [http://svalz.stanford.edu](http://svalz.stanford.edu).
Spotlight: Brian Yochim, PhD, ABPP
Clinical Neuropsychologist, Mental Illness Research, Education, and Clinical Center (MIRECC), VA Palo Alto Health Care System; Clinical Assistant Professor (Affiliated). Department of Psychiatry and Behavioral Sciences. Stanford University

Dr. Brian Yochim obtained a Ph.D. in clinical psychology from Wayne State University in Detroit, Michigan in 2003, and completed his doctoral internship at VA Palo Alto in 2004. He then completed a two-year postdoctoral fellowship in clinical neuropsychology, with a focus on aging, at the VA Northern California Health Care System in Martinez in 2006. From 2006 to 2010 he was an Assistant Professor at the University of Colorado at Colorado Springs (UCCS), where he taught graduate courses, supervised neuropsychological evaluations, and conducted research on aging within the context of a Ph.D. program in clinical psychology with an emphasis on aging. He is board certified in clinical neuropsychology by the American Board of Professional Psychology (that’s the “ABPP” after his name). In 2010 he accepted an invitation to return to the Bay Area and join the research team directed by Jerome Yesavage, MD, at the MIRECC at VA Palo Alto.

Brian conducts research in several areas of dementia and its diagnosis. Part of the diagnosis of dementia involves completing a neuropsychological evaluation, which involves several activities in which patients are asked to remember things and to solve various problems. Brian is interested in finding the most valid measures to use in this process requiring as little of patients’ time as possible. One shortcoming of the field is that there are few tests to use for diagnosing dementia in persons with visual impairment, despite the increased rates of visual impairment in older adults. He would like to correct this deficiency and is currently seeking grant funding to create a new test to use in diagnosing dementia in older adults with visual impairment. Brian is also very interested in exploring the degree to which symptoms of depression and/or participation in cognitively-stimulating activities predict the development of dementia.

Brian is excited to work with world renowned researchers at the MIRECC and Stanford, and is thankful for the opportunity to work with older adults who are willing to participate in his studies. In his free time, he enjoys exploring California with his wife, hiking, and visiting friends and family.

Mild Cognitive Impairment (MCI)

This is a condition in which cognitive impairments such as memory loss, language deficits, and decreased decision making capabilities are undeniably present (being noticed by others and observable in memory and cognition tests), but are not yet severe enough to interfere with everyday life. When cognitive impairments are clearly noticeable in an individual, yet are not severe enough to impact one’s life, a diagnosis of MCI is appropriate. MCI patients are at a higher risk to develop more serious forms of dementia, which makes an early MCI diagnosis important so that individuals can plan for the future while still functioning at a high level.

Diagnosis

Different forms of dementia often require different forms of treatment and care. They also have different time trajectories. Obtaining an accurate diagnosis is critical for maximum treatment effectiveness and planning. Anyone interested in getting a free memory evaluation and diagnosis should contact the Stanford/VA Alzheimer’s Research Center at 650-858-3915. By: Jeff Newell

Information for this article was collected courtesy of the Alzheimer’s Association at www.alz.org.
RESEARCH OPPORTUNITIES

Alzheimer's Disease Neuroimaging Initiative (ADNI)

The Alzheimer’s Disease Neuroimaging Initiative (ADNI) is a nationwide study with the goal of determining whether imaging of the brain (through MRI, PET and amyloid imaging scans) and collection of blood and cerebral spinal fluid (via lumbar puncture) can help predict and monitor the progression of mild cognitive impairment (MCI) and Alzheimer’s disease.

You may be able to participate in the ADNI study if:
• You are 70-90 years of age with no memory complaints, or 55-90 years of age with mild cognitive impairment or Alzheimer’s disease
• You have a study partner- a friend or relative who can accompany you to some clinic visits.
• You can be available for 5-10 clinic visits per year for 5 years

Citalopram for Agitation in Alzheimer’s Disease (CitAD)

The goal of the CitAD study is to see if a medication called Citalopram (Celexa) is helpful to people experiencing memory problems and anxiety. Benefits include a review of current medications by the study physicians, psycho-social support from a gero-psychologist for the care partner, and a 24-hour help line.

You may be able to participate in the CitAD study if:
• You are over 50 years old
• You have a diagnosis of probable Alzheimer’s disease, and are experiencing some anxiety
• You have a study partner- a friend or relative who can accompany you to all clinic visits

Navigation Study

We are interested in navigation abilities in cognitively healthy adults from the general population. We will be using memory tasks involving objects and words, including a computer game that asks you to “drive” around a town as a taxi driver. Your participation will help us develop memory tasks that can be used in future studies of brain imaging.

You may be able to participate if:
• You are 45 to 75 years old
• You have no particular memory problems
• You have no prior stroke, mental illness, major depression or other neurological disorders
• You have prior experience using a computer

To sign up for this study
Contact: Michelle Farrell
(650) 849-0491

To sign up for this study
Contact: Jeff Newell
(650) 493-5000 1,1, ext. 65275

To sign up for this study
Contact: Maheen Adamson
(650) 493-5000 1,1, ext. 62179
RESEARCH OPPORTUNITIES

Longitudinal Sleep Study

To sign up for this study
Contact: Deryl Wicks
(650) 493-5000 1,1, ext. 64052

This observational study is designed to look at sleep/wake patterns in persons with memory problems over the course of time.
Once a year, this study will collect a 1 week record of your sleep, in your own home. No treatment is involved.

You may be able to participate if:
• You are 55 years or older
• You have memory impairment or dementia
• You live at home with a caregiver/study partner

Memory Screening

For dates of Memory Screening sessions, or to sign up for Memory Screening Day
Contact: (650) 852-3287

This project is developing an approach to screen for memory problems in group sessions.
Each screening session:
• Begins with a brief talk on memory & aging
• Involves simple memory games many enjoy
• Reviews your results and concerns with staff

Please call for the next Memory Screening session or join us on National Memory Screening Day, Tuesday, November 15, 2011.

Memory Evaluations

To sign up for this study
Contact: Elena Marinelli
(650) 493-5000 1, 1, ext. 67729

The Stanford/VA Alzheimer’s Research Center provides no-cost, comprehensive memory evaluations and follow-ups for patients with memory concerns or complaints. A physician’s referral is not necessary. Patients may be eligible to participate whether or not they have previously been diagnosed with memory problems. The memory evaluation consists of a meeting with a clinician, a brief neurological exam, and neuropsychological testing. Upon completion of the evaluation, the patient and family will meet with a clinician to review the diagnosis and any recommendations or referrals to community resources, and to discuss other issues or concerns.

You may be able to participate if:
• You have memory concerns or complaints
• You are community-dwelling (i.e., not residing in a nursing home)
• You have a study partner (friend or relative) who is willing to provide information for a baseline visit and possibly for subsequent semi-annual or annual visits
RESEARCH OPPORTUNITIES

Mild Cognitive Impairment (MCI) Support Group Effectiveness Project

Designed for newly diagnosed persons with MCI and their care partners, this project aims to evaluate the effectiveness of support groups as a means of alleviating symptoms of depression and improving quality-of-life and relationships. Participants will attend ten support group meetings. They will then provide feedback regarding their experiences in a separate focus group session. The first phase of the study has been completed and announcements regarding recruitment for participants in the second phase will be made later this year.

To sign up for this study
Contact:
(650) 858-3915

Computer Games and Well-being Study

Are you feeling anxious or down most of the time?
Are you interested in how computer games can improve your concentration and well-being?

The study consists of several laboratory visits during which you will complete computerized exercises and questionnaires, and daily homework completed either from home or in our laboratory.

You may be eligible to participate if:
• You have anxiety or depression
• You have internet access and a computer at home

To sign up for this study
Contact: Etkin Lab at (650) 725-9510
(please leave a voicemail) or stanfordpsychiatry@gmail.com

Psychotherapy for PTSD

Are you distressed by memories of a traumatic event?
This study takes brain scans before and after people with Post-traumatic Stress Disorder (PTSD) receive the gold standard psychotherapy treatment for PTSD. The goal is to identify changes that occur in the brains of people with post-traumatic stress disorder during psychotherapy and help guide the development of new treatments.

You may be eligible to participate if:
• You have experienced a traumatic event
• Your life is affected negatively by unwanted memories of that event

To sign up for this study
Contact: Etkin Lab at (650) 725-9510
(please leave a voicemail) or stanfordpsychiatry@gmail.com
Updates on Dementia: Translating Research into Practice

The annual Updates on Dementia: Translating Research into Practice Conference will be held on Wednesday, May 18, 2011 at the Crowne Plaza Hotel in Foster City.

Now in its 14th year, this conference will convene with a faculty from well versed backgrounds, and is sponsored by the VA Palo Alto, in partnership with the Alzheimer’s Association, Family Caregiver Alliance, Institute on Aging and the Stanford Geriatric Education Center.

Dr. Frank Longo of Stanford University will present the latest research on Alzheimer’s disease and Dr. Daniel Marson, Director of the Alzheimer’s Disease Center, University of Alabama at Birmingham will discuss “Capacity in Patients with MCI and AD”. Other faculty members include Dr. Kala Mehta, UCSF, Ron Finley, Clinical Pharmacist, UCSF, and Joanne Rader, who will close the conference with, “Could You Live in Your Care Setting and Maintain Your Best Behaviors?” CEUs offered. Please register online at: http://edconference.kintera.org/uod2011, or contact Blanca Vazquez at blanca.vazquez@alz.org, at (650) 962-8111.

Preliminary Results of Projects at the Stanford/VA Alzheimer’s Research Center

Psychosocial Factors in Alzheimer’s Disease Progression

This is an ongoing study investigating the use of support services among Alzheimer’s disease (AD) patients and their caregivers and whether participation in these services slows the rate of cognitive decline and delays time to institutionalization.

Although recruitment for this study is closed, we continue to follow participants who are already enrolled. Preliminary data analysis is in progress and findings will be submitted for publication later this year.

Medication Reassessment Study

This ongoing study evaluates the effectiveness of anti-Alzheimer’s medications, with a particular focus on ethnic minority patients. While recruitment for the study is closed, we continue to follow active participants. Preliminary findings were presented at the annual meeting of the American College of Neuropsychopharmacology (ACNP) and manuscript preparation is currently underway.

Genetic Factors in AD

Alzheimer’s disease is the most common progressive, neurodegenerative disease with advancing age as the number one risk factor. A family history of dementia, especially maternal transmission, has been the most consistently identified second common risk factor. Normal individuals who have a first-degree relative with AD are four to ten times more likely to develop Alzheimer’s compared to those with no family history.

There are two types of AD: Early onset and late onset. Rare genetic mutations are seen among the early-onset forms for familial AD, but the genetics of late onset AD remain unclear. Some are sporadic, but many of the late onset AD cases have some genetic risk which is obvious from the familial aggregation. Apolipoprotein E (APOE) is one of the known predisposing risk factors in late onset AD. To study the other risk factors, many new techniques were developed, which included taking blood samples, measuring biomarkers, brain imaging and making family pedigrees. These methods are sensitive to pre-symptomatic brain changes and help look at the mode of inheritance to identify genetic risk profiles.

As part of our diagnostic process, we continue to document the family histories of MCI and Early Stage AD patients with history of MCI or AD in two or more family members. Understanding the risk factors for pre-symptomatic brain changes may assist in identifying candidates for future prevention and treatment trials.
Landmark Alzheimer’s Study Seeks New Participants

What is ADNI?

The Alzheimer’s Disease Neuroimaging Initiative (ADNI) began in October 2004 as a ground breaking collaboration of scientists at over 55 research centers in the U.S. and Canada. The purpose of the original study was to examine how brain imaging technology could be used with other tests to measure the progression of mild cognitive impairment (MCI) and early Alzheimer’s disease (AD). Over the past 6 years, ADNI researchers have gathered and analyzed thousands of brain scans, genetic profiles, and biomarkers in blood and cerebrospinal fluid, and made these results freely available to the scientific community. This vast database has been used both by ADNI researchers and independent scientists to create a growing library of over 240 published papers. These results have also established a standardized approach for tracking the progression of Alzheimer’s disease, which is now used by scientists developing drugs that could potentially be used to treat and prevent Alzheimer’s disease.

Early Detection of Alzheimer’s Disease

Most notably, ADNI researchers found that these tools could also be useful as a method of identifying the earliest stages of Alzheimer’s disease in healthy older adults with little or no memory impairment. Tools such as PET scans and lumbar punctures have detected high levels of a protein believed to contribute to the onset of Alzheimer’s (amyloid beta) in completely healthy older adults. Whether the presence of this protein is an indicator of early stages of Alzheimer’s disease is still unclear, and the new phase of the Alzheimer’s Disease Neuroimaging Initiative (ADNI2) seeks to answer this question and many others concerning the detection of Alzheimer’s disease in the healthy and only mildly-impaired older adults.

Lumbar Puncture

Recent research has especially stressed the potential value of the lumbar puncture, a procedure that involves the removal of a cerebrospinal fluid from a numbed lower back with a small needle that has been well-tolerated by past participants. Stanford ADNI study physician Dr. Wes Ashford notes that “the obtained cerebrospinal fluid has been found to detect important changes relevant to Alzheimer’s disease decades before symptoms develop, which may soon lead to successful prevention strategies.”

ADNI2

Researchers at the Stanford/VA Aging Clinical Research Center are seeking new volunteers to join those already participating in the nationwide study as it enters a second NIH-sponsored phase, called ADNI2. Over the next five years, participants will be followed to define any changes in brain structure and function as people transition from normal cognitive aging to mild cognitive impairment (MCI), often a precursor to Alzheimer’s disease. Researchers hope to identify who is at risk for Alzheimer’s, track progression of the disease and devise tests to measure the effectiveness of potential interventions. The study will use MRI and PET imaging techniques and biomarker measures in blood and cerebrospinal fluid specially developed to track changes in the living brain.

Seeking New Participants

We are seeking a wide range of participants for this 5 year study, including individuals ages 70-90 who are cognitively healthy, as well as participants ages 55-90 who have mild memory problems or diagnoses of MCI or mild Alzheimer’s disease. Participants will undergo MRI, cognitive testing and blood draws 1-3 times annually, as well as lumbar punctures and PET scans every two years. Participants should be in good general health and should not participate if they have a pacemaker or other metal implants or have recently undergone radiation therapy. Participants must also have a study partner who is able to attend at least 1 clinic visit per year. Participants will receive reimbursement of $50 per procedure, for a total of over $2000 across the 5 years of participation.

If you or someone you know is interested in participating in this study, please call Michelle Farrell at (650) 849-0491.
Healthy Recipe: Blueberries with Lemon Cream

Blending vanilla yogurt and reduced-fat cream cheese creates a topping that’s as virtuous as it is delicious. Any fresh berry can be used in this recipe.

4 servings, 1/2 cup each | Active Time: 10 minutes | Total Time: 10 minutes

**Ingredients**
- 4 ounces reduced-fat cream cheese, (Neufchatel)
- 3/4 cup low-fat vanilla yogurt
- 1 teaspoon honey
- 2 teaspoons freshly grated lemon zest
- 2 cups fresh blueberries

**Preparation**
1. Using a fork, break up cream cheese in a medium bowl. Drain off any liquid from the yogurt; add yogurt to the bowl along with honey. Using an electric mixer, beat at high speed until light and creamy. Stir in lemon zest.
2. Layer the lemon cream and blueberries in dessert dishes or wine glasses. If not serving immediately, cover and refrigerate for up to 8 hours.

**Nutrition**
Per serving: 156 Calories; 7 g Fat; 4 g Sat; 0 g Mono; 22 mg Cholesterol; 19 g Carbohydrates; 6 g Protein; 2 g Fiber; 151 mg Sodium; 189 mg Potassium; 1 Carbohydrate Serving; Exchanges: 1 fruit, 1 fat (saturated)

**Tips & Notes**
- Make Ahead Tip: Cover and refrigerate for up to 8 hours.

**Suggestions from the Stanford Team:**
- Serve in a parfait glass
- Serve as a topping with crepes
- For more berry flavor, use 1 teaspoon instead of 2 of freshly grated lemon zest

http://www.eatingwell.com/recipes/blueberries_with_lemon_cream.html

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Make a difference: Help end Alzheimer’s Disease!

A contribution to the Aging Clinical Research Center is a gift to future generations in our quest to cure Alzheimer’s disease. Your generous support ensures that the Center continues to conduct top-quality clinical research to improve treatment options and to provide education and support for patients and families. With your help, our clinical researchers investigate the causes of memory loss and neurodegeneration, develop and test better treatments for Alzheimer’s disease, and share these discoveries with the local community and with scientists around the world.

Tax-deductible contributions can be made by check, payable to: Stanford University

Please indicate Stanford/VA Aging Clinical Research Center in the memo line.

Mail your contributions to:
Jerome Yesavage, MD, Director
Stanford/VA Aging Clinical Research Center
3801 Miranda Avenue (151Y)
Palo Alto, CA 94304

Gifts may be made in honor of someone’s special occasion or in memory of someone who has passed away. Please provide the name of the person you wish to honor, as well as the name and address of anyone whom you wish to receive an acknowledgement of the gift.

For additional information about the Stanford/VA Aging Clinical Research Center and opportunities, or to contribute, call (650) 852-3287. All donations are tax-deductible.
UPCOMING EVENTS

Updates on Dementia Conference
When: Wednesday, May 18, 2011, 8:00 am - 4:00 pm
Where: Crowne Plaza Hotel, Foster City, CA
Register at: http://edconference.kintera.org/uod2011

Goals of this conference include: Defining new approaches to the detection of Alzheimer’s disease at early stages; new ways of thinking about therapy and therapeutic trials; cognitive and personality changes in Alzheimer’s disease; and the latest progress and pitfalls of drug therapy for Alzheimer’s disease.

NAMIWalks
When: Saturday, May 21, 2011
Where: Lindley Meadow, Golden Gate Park, San Francisco, CA

NAMIWalks is the signature walkathon event of NAMI, the National Alliance on Mental Illness, the largest education, support and advocacy organization that serves the needs of persons with mental illness, their families, friends, employers, the law enforcement community and policy makers. The goals of the NAMIWalks program are to fight the stigma that surrounds mental illness, to build awareness of the fact that the mental health system in this country needs to be improved, and to raise funds for NAMI.

Walk to End Alzheimer’s
When: Saturday, October 15, 2011, Check-In opens at 8:30am, Walk begins at 10:00am
Where: Arena Green Park, Downtown San Jose, San Jose, CA
Register at: http://walktoendalz.kintera.org/sv11

Stanford/VA Aging Clinical Research Center
3801 Miranda Ave. (151Y)
Palo Alto, CA 94304
650-852-3287

Visit us on the web:
Aging Clinical Research Center (ACRC): http://alzheimer.stanford.edu
Stanford/VA Alzheimer’s Research Center: http://svalz.stanford.edu
Sierra-Pacific MIRECC: http://www.mirecc.va.gov/visn21/

To add or remove your name from our mailing list, call (650) 852-3287 or visit the ACRC web site.

Director: Jerome Yesavage, MD
Assistant Director: Joy Taylor, PhD
Contributors: Tamara Beale, Virginia Dao, Michelle Farrell, Emily Gere, Ellen Kim, Elena Marinelli, Jeffery Newell, Betsy Nilson, Heather Taylor, Deryl Wicks, Maheen Adamson, PhD, Wes Ashford, MD, Peter Bayley, PhD, Helen Davies, MS, APRN, Leah Friedman, PhD, Ansgar Furst, PhD, Gerald Georgette, RN, Brian Yochim, PhD

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