



THE DEMENTIAS: IT'S NOT ALWAYS ALZHEIMER'S DISEASE

Frank M. LaFerla, Ph.D.



"My mother doesn't have Alzheimer's. She just has dementia." This is often heard when a family member is talking about a loved one who is experiencing memory loss. It may be comforting to use the seemingly safer sounding word, dementia, instead of the dreaded word, "Alzheimer's", to describe troubling behaviors, but it is not wise to hide behind words that may hamper appropriate treatment and a proper diagnosis.

Moreover, it may not always be Alzheimer's disease. There are a number of different disorders that fall under the umbrella word, dementia, just as cancer must be differentiated between breast cancer or lung cancer or colon cancer.

Dementia is a general term for memory loss and decline in mental ability that is severe enough to interfere with the activities of daily living. Dementia can result from a variety of irreversible and potentially reversible causes. Reversible causes of dementia can include depression, vitamin B12 deficiency, hypothyroidism, side effects from medications, and infections. It is obviously important to know if the diagnosis can identify one of these reversible causes.

85-95% of dementias are due to irreversible causes. It is important to diagnose which particular disease may be causing the problems. Just like not all cancer medications work for all the different forms of cancers, medications and treatments for the different forms of dementia can vary widely, highlighting the need for an accurate diagnosis.

This is also important because 1 in 8 individuals over 65 will

have a dementia and currently over 70% of them do not ever receive a clear diagnosis. Most older adults receive their medical care from primary care and other community physicians who often lack the clinical diagnostic information necessary to accurately determine the type of dementia afflicting the patient.

The Dementias: It's Not Always...



The most common form of irreversible dementia among the elderly is Alzheimer's disease, which accounts for approximately 60% of all cases. More than 35 million people in the world suffer from Alzheimer's disease, including 5.3 million in the USA. The scourge of Alzheimer's disease adversely impacts California as 600,000 residents are affected, including over 60,000 individuals in Orange County.

The remaining 40% of dementia cases are caused by a variety of different disorders. These include Lewy body dementia, frontotemporal dementia, vascular dementia, Parkinson's disease dementia, Huntington's disease dementia, Creutzfeldt-Jacob dementia and a number of other very rare disorders.

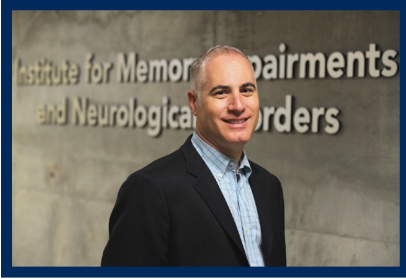
Mild Cognitive Impairment (MCI) and Alzheimer's Disease

It is important to get an accurate diagnosis of dementia and to get that diagnosis as early as possible. Studies show that a diagnosis is undetected in up to 91% of persons with mild symptoms and undetected in 76% of persons with moderate to severe symptoms. Families struggle to get a diagnosis, spending more than two years and seeing more than two doctors in the process. Families often battle over what is "normal" with their

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From the Director...

Frank LaFerla, Ph.D.



UCI MIND is proud to play a leading role in the scientific and humanitarian battle against Alzheimer's disease. Simply stated, our scientific goals are

to research ways to make memories last a lifetime! If we are successful, Alzheimer's disease won't have to be our reward for living a long and prosperous life. Besides research, another critical mission of the Institute is to play a leading role in helping to educate and unpackage cutting edge discoveries in the field and communicating them to our surrounding community in southern California. We are particularly interested in focusing on those discoveries that are likely to have the greatest impact on the lives of individuals with devastating brain disorders.

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Along these lines, we offer a variety of educational forums to increase awareness in the local community about dementia and neurological disorders. For example, UCI MIND provides a unique resource for families with a loved one diagnosed with Frontal Temporal Dementia and Lewy Body Dementia by offering the only support group for families and caregivers in Orange County. Often times, these families are very frustrated about the lack of resources and do not fit in with the standard Alzheimer's Disease support groups. Currently, the group has over 100 members who come from as far away as Los Angeles, San Bernadino, Riverside, and San Diego Counties.

The Institute, along with its community partners, Alzheimer's Association of Orange County and Alzheimer's Family Services is quite proud of the success of its recent annual conference. The topic of this year's conference was "The Dementias: It's Not Always Alzheimer's Disease." The conference sold out quite early this year, as we offered continuing medical education credits to physicians for the first time. More importantly, we are succeeding in educating the community that just as there are many different types of cancers, there are also many different types of dementia.

Sadly, there is a stigma associated with many neurological disorders and they are often spoken about only in a whispered voice. One of the goals of UCI MIND is to help educate the public so we can have an open dialogue, increase awareness, and positively affect public policy. As science is coming under increased attacks for political gain, it is more important than ever that individuals up the stakes, and that non-profit research institutions such as UCI MIND strive to improve human health, and again for us specifically, to make your memories last a lifetime.

Everyone can help play a role in fighting the scourge of neurological disorders so we can eventually achieve a world without Alzheimer's, Huntington's or Parkinson's disease. More than ever, this is a critical period as the federal government's contributions to research fail to keep up with the scope of the looming problem. Funding for scientific research by the National Institutes of Health (NIH) is at an historical low, and shockingly, the National Institute on Aging, which funds the majority of Alzheimer's grant proposals, is among the worst, with only 8% of applications being funded. Several years ago, one out of every five applications were funded, now it is less than one out of every twelve!

Right now someone develops Alzheimer's disease every 70 seconds and over the next few decades, someone will develop this horrible disease every 30 seconds.

Right now someone develops Alzheimer's disease every 70 seconds and over the next few decades, someone will develop this horrible disease every 30 seconds. Clearly, now is the time to be increasing support for research, not decreasing it. Reducing support has many obvious negative consequences, but one not so obvious one is that it deters young scientists from entering the field and thereby we risk losing a whole generation of researchers. If you or someone you know can help fund research, please make them aware of the urgency of Alzheimer's disease so we can make everyone's memories last a lifetime!

Frank LaFerla, Ph.D.
Director

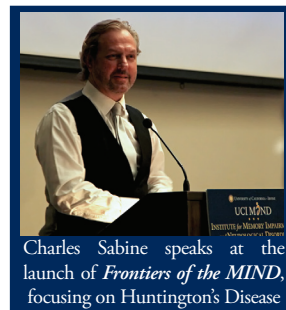


IN THE NEWS

Exciting discoveries, achievements, and updates from the Institute for Memory Impairments and Neurological Disorders

UCI MIND LAUNCHES: FRONTIERS OF THE MIND

UCI MIND launched a new community-oriented lecture series entitled Frontiers of the MIND. The first Frontiers of the MIND was held on October 20 and featured former NBC News Correspondent Charles Sabine, who talked about his personal connection to Huntington's disease. UCI MIND scientists Drs. Leslie Thompson and Neal Hermanowicz provided introductory lectures on the genetics and clinical aspects of Huntington's disease.



Charles Sabine speaks at the launch of *Frontiers of the MIND*, focusing on Huntington's Disease

INVESTIGATORS RECEIVE EARLY TRANSLATION GRANTS



Dr. Leslie Thompson received a multi-million dollar grant for Huntington's Disease research

Dr. Leslie Thompson, noted Huntington's disease researcher, received a multi-million dollar grant from the California Institute for Regenerative Medicine. The grant seeks to transplant stem cells as a potential treatment for Huntington's disease. This multi-investigator grant includes researchers, Drs. LaFerla and Donovan at UCI, as well as scientists from nearby universities in southern California.

Dr. Brian Cummings and Aileen Anderson, associate professors of Physical Medicine and Rehabilitation received a \$1.7 million grant to explore the utility of using neural stem cells to treat traumatic brain injury. Traumatic brain injury devastates over a million Americans per year, and is considered a major risk factor for Alzheimer's disease.



Drs. Brian Cummings and Aileen Anderson received a multi-million dollar grant for traumatic brain injury research



Dr. Kim Green is appointed UCI MIND's newest faculty member

UCI MIND WELCOMES DR. KIM GREEN

The Institute welcomes its newest faculty member, Dr. Kim Green, who was recently appointed as an Assistant Professor In-Residence in the Department of Neurobiology and Behavior. Dr. Green received his Ph.D. From the University of Leeds and completed his postdoctoral training at Irvine. His research interest relates to pre-clinical drug development, and several compounds that he has investigated are currently being evaluated in human clinical trials.

UCI DANIEL G. ALDRICH AWARD FOR DISTINGUISHED SERVICE

Institute director Frank LaFerla was awarded the UCI Daniel G. Aldrich Award for Distinguished Service. This recognition is given by the UCI Academic Senate and was provided for the years of service that he has contributed to the campus, including previously serving as the founding director of the Interdepartmental Neuroscience Program and for his efforts in transforming the Institute.



Dr. Frank LaFerla receives UC Irvine's Daniel G. Aldrich Award for Distinguished Service



Shirley and her husband, Gat, celebrating their anniversary during her hospital stay

MIND OVER MATTER: A MOTHER'S JOURNEY

Shirley Sirivong, Community Health Program Manager for the UCI MIND, was recently featured in the OC Register, CBS Los Angeles.com, and Parenting.com for her perseverance and inspirational journey after a complicated pregnancy. She is expecting a baby boy in December but due to several medical complications that have arisen, Shirley has been forced to remain on bedrest for the past five months, including hospitalization. The faculty and staff at UCI MIND have been extremely supportive, and wish Shirley and her family well during this challenging time.

Meet the Neuroscientist at UCI MIND

DAVID H. CRIBBS, PH.D.



David H. Cribbs (PhD) is a Professor in the Department of Neurology, and a member of the Institute for Memory Impairments and Neurological Disorders at UCI. Dr. Cribbs also serves as the Co-Director of the Alzheimer's Disease Research Center (ADRC) Neuropathology Core, which is responsible for maintaining

the human brain tissue repository at UCI. He received a B.S. from St. Mary's College of Maryland, and a Ph.D. in Biochemistry from West Virginia University. He was awarded a National Institutes of Health (NIH) postdoctoral fellowship award while in the Department of Biophysics, at The Johns Hopkins University. In 2008, Dr. Cribbs received the Van den Noort Award for Outstanding Research in the Department of Neurology at UCI. Dr. Cribbs has published more than 90 peer-reviewed papers and review articles, and has served on multiple National Institutes of Health Center for Scientific Review Study Section panels, including the Clinical Neuroimmunology and Brain Tumors Study Section where he was a regular member for four years. He is currently a member of the New York Academy of Sciences, Society for Neuroscience; American Association of Immunologists; American Society for Neurochemistry; International Society of Neuroimmunology, and the International Society to Advance Alzheimer Research and Treatment. Dr. Cribbs is currently involved in the development of immunotherapeutic approaches for Alzheimer's disease (AD) and other neurodegenerative diseases. He, along with his collaborators, developed the first epitope vaccine for AD, which was designed to eliminate the risk of a autoimmune disease in response to active immunization in AD patients, and he has been investigating the causes of microhemorrhages and vasogenic edema in response to immunotherapy in AD patients. Finally, his laboratory has recently begun to investigate the pathogenic mechanisms involved in cerebral vascular degeneration in AD, which are prominent features in approximately 85% of the cases.

Meet the Clinical Nurse and Clinical Trials Coordinator

BEATRIZ YANEZ, R.N.



My career at the UCI Institute for Memory Impairments and Neurological Disorders (UCI MIND) began while I was an undergraduate student. I was hired as a student assistant in the Fall of 1999 to help with a variety of tasks including filing and mailers. When I first began with UCI MIND, I'd never heard of the terms "dementia" or "Alzheimer's disease". I

quickly learned how devastating dementia was and the more I learned about it and other degenerative neurological disorders, the more interested I became. I graduated from UCI with bachelor's degree in Environmental Analysis and Design with a minor in Public Health and Epidemiology in June 2002 and was soon given the wonderful opportunity to join the UCI MIND's clinical trials team as a full-time Clinical Trials Recruitment Coordinator.

This experience provided me the opportunity to work alongside expert clinicians who, all in many ways, fostered my growing interest in Alzheimer's clinical research. In my role, I was responsible for many of the coordination aspects of patient visits, recruitment and retention, and performing psychometric testing for ongoing clinical trials studies. One aspect of my experience that helped to guide my career, and my decision to pursue a degree in Nursing, was the close relationship that I was able to develop with the patient and their family. I was accepted to Golden West College's nursing program in the Winter 2007 and successfully completed my degree in December 2009. Nursing was always a career that I wanted to pursue because it allowed me to care and provide for individuals who needed a little extra comfort and attention.

I feel extremely privileged to have rejoined UCI MIND after completing my nursing degree, as an integral part of the Memory Assessment Clinic and to help coordinate and actively participate in a national Alzheimer's disease clinical trial. The ability for me to continue to work with such a wonderful group of patients and families, scientists, and clinicians is truly a blessing and an added reason to do what I enjoy doing while providing hope for the many who are suffering with dementia.

Save the Date: 2011 Wine for the MIND

Save Memories with Style

Imagine research for Alzheimer's disease at UCI without the UCI MIND Memory Assessment Clinic. It is not possible.

If the clinic were forced to close its doors due to the second year of a 50% State budget cut, it would halt the advances that have been made in recent years, advances that are in line for clinical trials and potentially to be translated into treatments. UCI MIND is an institute at UCI that bridges science-based discoveries in the lab with the patients who can benefit from them. Since opening its doors in 1989, the clinic has helped more than 6,000 patients with early diagnosis and treatment.

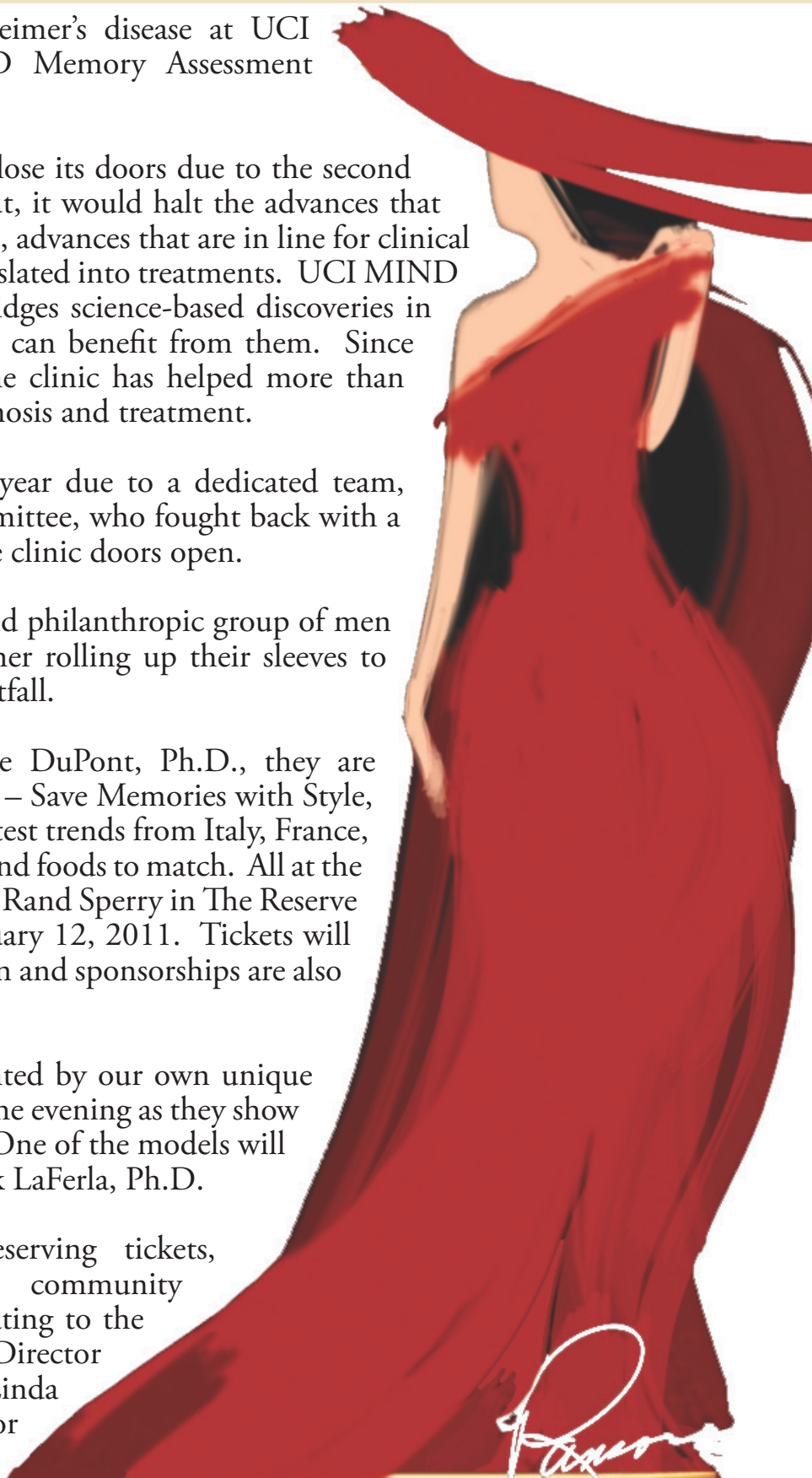
The threat was averted last year due to a dedicated team, the Wine for the MIND committee, who fought back with a fundraising event that kept the clinic doors open.

Once again, this energetic and philanthropic group of men and women have come together rolling up their sleeves to raise the nearly \$300,000 shortfall.

Chaired again by Jacqueline DuPont, Ph.D., they are planning Wine for the MIND – Save Memories with Style, a fashion show featuring the latest trends from Italy, France, Spain and the US, with wines and foods to match. All at the private home of Rosemary and Rand Sperry in The Reserve in Orange, on Saturday, February 12, 2011. Tickets will be available for \$150 per person and sponsorships are also available.

The evening will be highlighted by our own unique models who will be styled for the evening as they show off the latest clothing trends. One of the models will be UCI MIND director, Frank LaFerla, Ph.D.

For information about reserving tickets, becoming a sponsoring community partner for the event, or donating to the silent auction, please call Director of community relations, Linda Scheck, 949-824-3251 or lscheck@uci.edu.



misinterpretations leading to stress and conflict. The actual diagnosis often provides relief for many. An early diagnosis gives families time to plan, to maximize safety, to participate in clinical trials and to experience benefits of the medications available today that are most effective when started early.

People who experience normal aging find that it takes a longer time to process new information and more effort to learn, organize and store new information. There is a greater susceptibility to distraction. They are slower to recall



information, but the ability to retrieve it remains intact. It is harder to quickly switch mental gears between several tasks.

There is a new and emerging area in the course of aging that is called the Preclinical period in which the individual may complain of problems with recent memory, concentrating or other cognitive abilities, but scores within the normal range on objective tests assessing these abilities. This is referred to as “a stage where the person knows – but the doctor doesn’t.”

Mild Cognitive Impairment (MCI) is diagnosed when the cognitive decline exceeds that expected for a person's age and education, but the impairment does not interfere significantly with the activities of daily living. Multiple studies indicate that 8-15% of people with MCI progress to Alzheimer's disease each year, compared to only 1-2% of older adults in general. Not all individuals with MCI progress to Alzheimer's disease or another form of dementia, and a sizable number may actually return to normal levels of functioning. Curiously, men are more likely to be diagnosed with MCI.

Individuals with MCI may also experience behavioral changes that involve depression, anxiety, aggression and emotional apathy; these can be due to the awareness of and frustration related to his or her condition. Anti-depressants are often prescribed to treat these problems. Medications approved for treatment for Alzheimer's disease may help with symptoms but do not ultimately halt the progression of the disease.

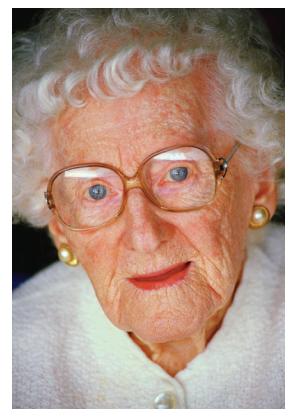
Vascular Dementia

Vascular dementia is caused by poor blood flow to the brain, depriving brain cells of the nutrients and oxygen they need to function normally. Vascular dementia can result from any number of conditions that narrow the blood vessels, including stroke, diabetes and hypertension. Post stroke dementia has a sudden onset and a stepwise progression and the cognitive profile is highly variable, depending on the location of the stroke. After a stroke the risk of dementia doubles. Controlling hypertension, weight, diabetes and heart disease are vitally important to helping prevent vascular dementia.

Lewy Body Dementia

Lewy Body dementia is characterized by accumulation of abnormal protein deposits called Lewy bodies, which we typically associate with Parkinson's disease. Most cases of Lewy body dementia occur in adults older than 60 and it appears to be more common in men. Common symptoms include visual hallucinations, fluctuating levels of attention (clear days and confused days), cognitive and motor dysfunction, sleep behavior disorder and severe sensitivity to anti-psychotic drugs.

The symptoms can closely resemble and overlap with Alzheimer's and Parkinson's making Dementia with Lewy bodies widely under-diagnosed. In fact, some patients start out with a movement disorder leading to a diagnosis of Parkinson's, then develop dementia and other symptoms of Lewy body dementia. Others present with cognitive dysfunction that may look like Alzheimer's initially, but with time, hallucinations, motor impairments and fluctuating attention appear. A third smaller group of patients present first with neuropsychiatric symptoms such as hallucinations, behavioral problems or difficulty with complex mental activities and later develop other symptoms. Drugs that are effective for Lewy body dementia include cholinesterase inhibitors which increase the levels of chemical messengers that are important for memory, thought and judgment and may help with hallucinations. Parkinson's disease medications which help with motor problems can also cause increased confusion and hallucinations. Antipsychotic medications may improve hallucinations, but at least a third of Lewy body dementia patients can exhibit dangerous sensitivity to neuroleptics.



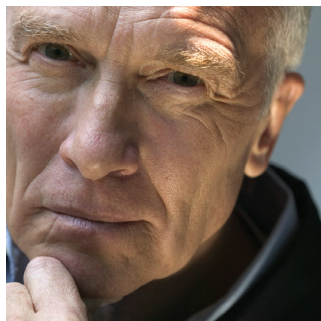
Frontotemporal Dementia

Frontotemporal dementia (FTD) causes damage to brain cells in the frontal and temporal lobes. FTD affects the individual's personality significantly, usually resulting in a decline in social skills, coupled with emotional apathy. The emotional deficits are extremely problematic and include lack of concern for a loved one's illness, cruelty to children, animals and the elderly, lack of concern when others are sad, rude comments, loss of respect for intrapersonal space, socially inappropriate behaviors, and diminished response to pain. Repetition, indifference to boredom, perseveration and focus on unimportant issues are some of the behaviors of patients with FTD. Unlike other types of dementia, FTD typically results in behavior and personality changes manifesting before memory loss and speech problems. It is more common than Alzheimer's in people younger than 60 years old. Anti-psychotics and cholinesterase inhibitors are not appropriate for these patients although anti-depressants such as SSRI's and the drug memantine may be helpful.

Parkinson's Disease Dementia

Parkinson's disease is a chronic, progressive neurological condition, and in its advanced stages, the disease can affect cognitive functioning. Not all people with Parkinson's disease will develop dementia. Parkinson's symptoms include tremors, rigidity, akinesia (immobility) and postural instability, muscle stiffness and reduced muscular power. Reasoning, memory, speech, and judgment are usually affected. Parkinson's is often accompanied by depression, hallucinations, anxiety, delusions, delirium, apathy and compulsive behaviors, some of which may be related to medications.

Performance may fluctuate during the course of a day or from day to day. The characteristics of executive functioning such as initiation, planning concept formation, rule finding and mental speed may be affected. Visuo-spatial functions such as orientation, perception and construction may be affected, causing a concern about driving. Memory may be affected in recall of recent events or learning new material although memory usually improves with cueing. Language is usually preserved although word finding difficulties and impaired comprehension of complex sentences may be present.



Huntington's Disease

Huntington's disease is an inherited progressive dementia that affects the individual's cognition, behavior and movement. Huntington's disease does not skip generations. Each child of a parent with Huntington's has a 50/50 chance of inheriting the defective gene. If a child does not inherit the gene, he or she cannot pass it on. If the child does inherit the gene, he or she can pass it on and will develop the disease.

The cognitive and behavioral symptoms of dementia due to Huntington's include memory problems, impaired judgment, problems with short-term memory, organizing, coping, concentrating, mood swings, depression and speech problems (especially slurred speech). Delusions and hallucinations may occur. In addition, the individual may experience fidgety behavior, lack of coordination, difficulty ambulating, and uncontrollable jerking movements of the face and body. Symptoms that may also occur are irritability, anxiety, aggressive outbursts and social withdrawal.

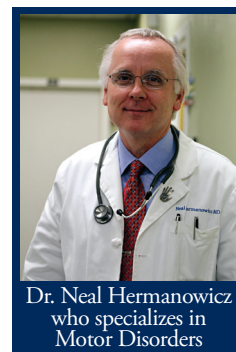
The average lifespan after onset is 10-25 years and the younger the age of onset, the more rapid the progression of the disease. Symptoms generally appear between the ages of 30 and 50, but can strike children and young adults.

The gene discovery has made possible a predictive test for Huntington's from a blood sample allowing those at risk to find out whether or not they will develop the disease. Pre- and post-test counseling is critical.

Summary

Early diagnosis can help identify the causes underlying the memory impairments affecting your loved one, and allows for prompt treatment. Since some causes of dementia are reversible, the sooner diagnosis and treatment are begun the better. For the irreversible dementias, early diagnosis can maximize safety of the affected person, allow families to educate and better prepare themselves, make important financial decisions, and allow individuals to consider participating in clinical trials.

If you are concerned about a memory problem for you or your loved one, please call the UCI MIND Memory Assessment Clinic at 949-824-2382.



Dr. Neal Hermanowicz
who specializes in
Motor Disorders

CLINICAL TRIALS

STUDIES SEEKING PARTICIPANTS

FOR MORE INFORMATION ABOUT RESEARCH OPPORTUNITIES OR CLINICAL TRIALS,
PLEASE CONTACT US AT (949) 824-3249 OR VISIT OUR WEBSITE AT:
www.mind.uci.edu/studies/clinicaltrials.html

Gammaglobulin Alzheimer's Partnership Study (GAP)

Clinical Trial

This clinical research study is designed to evaluate the effectiveness, safety, and tolerability of an investigational drug for Alzheimer's, and to determine if this investigational drug may help slow the progression of this disease.

Patients may be eligible to participate in the GAP Study if they:

- Are 50 to 89 years old.
- Have been diagnosed with probable mild-to-moderate Alzheimer's disease.
- Have a study partner (a spouse, child, sibling, or other caregiver) who can be present at every study visit to monitor the participant, and to help him or her complete key study procedures.

If the individual agrees to participate, they will be one of 360 subjects enrolled in the study, which will take place at 36-40 AD treatment sites in the United States. Approximately 10 subjects from this facility will participate in this study. This is a randomized, double-blind, placebo-controlled study. If the patient is found to be eligible for this study, the total period of his/her participation will be approximately 20 months. In this study, the patient will be given either a placebo (an inactive substance) or IGIV infusions intravenously (through a vein in the arm) every two weeks over a 70-week period followed by a 6-week follow-up period without treatment. All participants receive study-related care and monitoring and study-related drugs, at no cost.

Alzheimer's Disease Neuroimaging Initiative

Clinical Trial

Why are we doing this research study? Our goal is to determine whether imaging of the brain (through MRI, PET and amyloid imaging scans) can help predict and or the onset and progression of Alzheimer's disease. In addition to neuroimaging, the study will collect and test blood and cerebral spinal fluid to determine if biomarkers can predict and monitor the disease. Testing cerebral spinal fluid is the only way to obtain important brain information.

Who is sponsoring this research study? This research study is sponsored by the National Institutes of Health through the Research and Research Infrastructure "Grand Opportunity" (GO) grant program.

Where will the research study take place?

This research study will take place at 50 major university sites across North America. Researchers are looking for persons who:

- Are between 55 and 90 years of age
- Are in good general health but have memory problems or concerns
- Are fluent in English or Spanish
- Are willing and able to undergo the test procedures
- Have a study partner – a friend or relative who can accompany the volunteer to all clinic visits

Your health will be closely monitored by a team of doctors and nurses, at no cost to you. Any new information about your physical health will be shared with you and your physician (you are encouraged to continue seeing your regular doctor).

If you are interested in participating or have any questions, please call Deeba Sultani at (949) 824-5733.

GET INVOLVED IN RESEARCH

Help Us Find the Answers...

Research studies can be meaningful and valuable in the understanding of diseases from prevention to treatment. For more information, please call the study coordinators listed.

fMRI STUDY MEASURING BRAIN STRUCTURE AND MEMORY PERFORMANCE IN NORMAL OLDER ADULTS AND MCI

In our lab, we are studying the relationship between changes in brain structures as they relate to memory performance. One way that we can look at changes in these brain structures is to observe changes in memory that occur in normal aging as well as those changes associated with disorders of aging, such as mild cognitive impairment and Alzheimer's disease. We use fMRI (functional magnetic resonance imaging) to observe changes in activity in the brain while individuals perform memory tasks. By comparing the changes in activity to memory performance, we can observe which areas of the brain are involved in different kinds of memory operations.

- Who:** Successful aging program participants
Mild cognitive impairment diagnosis
Questionable cognitive impairment
- Time:** 2 visits, each 1-2 hours each
- Risk:** Minimal, but we will conduct a thorough screening for MRI compatibility

Compensation for the first session is \$15 per hour. Compensation for the second session is \$25 per hour. Both sessions are located on the UCI main campus. If you are interested in participating or have any questions, please call the Stark Lab at (949) 824-4230 and ask for Shauna Stark.



PHYSIOLOGY AND COGNITION RESEARCH

We are recruiting for a study that would involve two sessions, each lasting 1.5- 2 hours. In the first session you will be asked to give a small saliva sample and to participate in a fitness test on a stationary bicycle that will last approximately 12-14 minutes. You will also be asked to fill out some questionnaires at that time. Compensation for the first session is \$20.

During the second session you will be asked to view a short slide show of pictures and to rate each one according to how emotionally arousing you found it. Immediately following the viewing of the images, you may be asked to participate in a moderate exercise paradigm on a stationary bicycle for approximately six minutes. You will also be asked to give several small saliva samples throughout the experiment, and the total session time for the second session will be 1.5- 2 hours. Compensation for the second session is \$20.

- Who:** Normal individuals between the ages of 50 and 85 years old
Patients with Mild Cognitive Impairment (MCI)
Patients with Cognitive Impairment, No Dementia (CIND)

Where: The General Clinical Research Center (GCRC) at the UC Irvine Medical Center in Orange

When: Afternoons (between the hours of noon- 6pm)

Time: Two visits, each 1.5-2 hours long

Risks: Minimal risks associated with short period of exercise

Contact: Sabrina Segal @ 805-338-9246 or ssegal@uci.edu

YEAR END GIVING AND TAX BENEFITS

Linda Scheck



As you do your tax planning, we hope you will consider making good use of the income tax charitable deduction. Your year-end gift can reduce your income taxes while providing meaningful support for the research and assessment center at UCI MIND.

Regardless of your income, in most cases, you can lower the taxes you pay through charitable giving. Of course, the amount of the income tax savings will depend on your tax bracket.

As you know, giving is about much more than tax savings. Your charitable gifts make an important difference in what we are able to accomplish. The following are some of the best year-end gift ideas.

Cash

If you itemize, you can lower your income taxes simply by writing us a check by December 31. There is no easier way to garner a year-end charitable deduction. Gifts of cash are fully deductible — up to a maximum of fifty percent of your adjusted gross income. For instance, if your adjusted gross income is \$50,000, up to \$25,000 of charitable gifts may be deducted this year. Any excess can generally be carried forward and deducted over as many as five subsequent years.

Real Estate

Your residence, vacation home, farm or acreage may have appreciated in value through the years such that its sale would mean a sizable capital gains tax.

By making a year-end gift of this property instead, you would avoid the capital gains tax, and, at the same time, receive a charitable deduction for the full fair market value of the property.

It is also possible to make a gift of your home, farm or vacation home so that you and your spouse can continue to use it for your lifetimes — while you receive a current year tax deduction. Please contact us for more details.

Stock

If you own stock it is almost always more beneficial to contribute stock than cash. This is because a gift of appreciated stock generally offers a twofold tax savings.

First, you avoid paying any capital gains tax on the increase in value of the stock. Second, you receive an income tax charitable deduction for the full fair market value of the stock at the time of the gift.

Charitable Gift Annuities

If you own stock that is fluctuating with the stock market and is paying you little in dividends, a “life-income” gift may be an appropriate year-end gift.

You could transfer the stock to us and establish a “charitable gift annuity” that would provide you with a greater annual return. This income would be paid to you and/or a loved one for life, after which the assets would be distributed outright to UCI MIND.

Through such an arrangement, you may be able to increase your income and make a meaningful (and tax-deductible) contribution to us at the same time.

The following are some of the areas of support that your gift to UCI MIND would help us accomplish:

\$500 Underwrites the cost of community education programs that offer information about the causes of dementia, current and future treatment options, strategies to manage behavioral problems and community resources. These programs encourage people to get an assessment early.

\$1,000 Funds four in-home assessments for late-stage patients who are unable to travel or be seen at the clinic.

\$2,500 Funds collection of tear fluid from 25 subjects allowing researchers to identify Alzheimer related proteins as a possible new diagnostic tool.

\$5,000 Provides vitally needed training for medical students, nurses and physicians about Alzheimer's disease and other neurological disorders.

DONATIONS

from June 2010 - November 2010

\$10,000 Provides funding for 10 patients to have MRI's who would not be able to otherwise receive one. UCI MIND has provided such services to 30% of patients at no charge prior to the current budget cuts.

\$25,000 Funds the full assessment for 15 patients who could not otherwise be covered.

\$50,000 Funds the collection of cerebral spinal fluid (CSF) from 125 patients to be used to advance research to find an easy to use bio-marker blood test.

\$75,000 Funds the support of a clinical research coordinator in order to maintain ongoing clinical trials and research studies.

\$100,000 Funds one Adopt a Scientist program allowing a researcher to continue promising work for two years.

For more information contact:
Linda Scheck
UCI MIND
2646 Biological Sciences III
Irvine, CA 92697-4545
phone: (949) 824-3251
email: lscheck@uci.edu

We thank the following benefactors who are making a difference in supporting our mission to advance research into understanding the causes of memory impairments and neurological disorders. They are helping us reach our goal to diagnose the disease, identify the means to effectively treat it and to provide help to the individuals, families and caregivers.

Institute Benefactors of Distinction

Nancy Imlay Edwards Foundation

Institute Honor Roll

Mr. Edward S. Drollinger
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Honoraria/Memorials continued

In Memory of Elaine Eagleton cont.

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Help Us Make Memories Last a Lifetime...

UCI MIND

There are many ways to support the clinical and basic science research activities at UCI MIND.

- If the donation is being made in memory/honor of someone, please include a note with information as to where the acknowledgements should be sent.
- Please consider donating to UCI MIND through one of the many workplace campaigns organized by your employer. It is a simple way to support our research.
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* Layout for MIND Matters Newsletter was prepared by Shirley Sirivong



**INSTITUTE for MEMORY IMPAIRMENTS
and NEUROLOGICAL DISORDERS**

Save the Date
"Save Memories with Style"

February 12, 2011 7 to 10pm Saturday Evening

- Savor a wide variety of fine wines chosen just for you.
- Taste a delectable array of cuisines from many countries carefully paired with the evening's wine choices.
- Feast your eyes on the latest fashions modeled for you by your own OC community friends.

Take pleasure in all of this in the exquisite private home and gardens of Rosemary and Rand Sperry in The Reserve, Orange. Explore many silent & live auction items donated for your bidding, plus more surprises.

(For More Information, Please Contact Linda Scheck :
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