

# New Thinking

ABOUT THINKING

A Publication by Cleveland Clinic Lou Ruvo Center for Brain Health

Fall 2013  
[keepmemoryalive.org](http://keepmemoryalive.org)  
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## Expanding Clinical Services at Cleveland Clinic Lou Ruvo Center for Brain Health

Brain diseases are a major threat to public health. In Nevada alone, approximately 45,000 people suffer from Alzheimer's disease, Parkinson's disease and related degenerative brain disorders, and multiple sclerosis. Many types of resources are needed to meet the needs of these citizens. Cleveland Clinic Lou Ruvo Center for Brain Health focuses on providing services to these patients, as well as to individuals with Huntington's disease and frontotemporal dementia. This issue of *New Thinking About Thinking* announces expanded services of which we are very proud.

Frontotemporal dementia (FTD) bears many similarities to Alzheimer's disease, but also overlaps with psychiatric syndromes such as bipolar illness. FTD patients are commonly misdiagnosed. In this issue, we introduce our FTD clinic, led by Gabriel Léger, MD, and Sarah Banks, PhD, who bring special expertise in FTD to the

Lou Ruvo Center for Brain Health. The availability of this service will extend new opportunities to patients with FTD, improving diagnoses and supporting families.

We are expanding the Mellen Program for Multiple Sclerosis at the Lou Ruvo Center for Brain Health in Las Vegas with the addition of Staff Physician Le Hua, MD. Dr. Hua has specialty training in multiple sclerosis and research experience in brain imaging as a means of assessing multiple sclerosis patients. Dedicated to excellence in multiple sclerosis care, she will join Timothy West, MD, who leads our multiple sclerosis program. We welcome her to the Lou Ruvo Center for Brain Health.

Our Parkinson's Disease and Movement Disorders Program is also expanding to provide new services to patients with Huntington's disease. We recently added genetic counseling, available via

videoconferencing from Cleveland Clinic in Ohio, to the services we offer at our Huntington's Disease Comprehensive Clinic.

We are proud of these new programs and new staff, and look forward to adding more service lines and research projects to the Lou Ruvo Center for Brain Health to better meet the needs of Nevadans.

### **Jeffrey L. Cummings, MD, ScD**

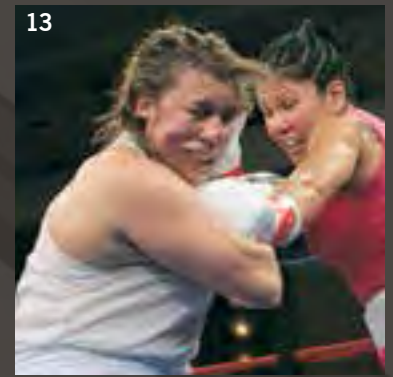
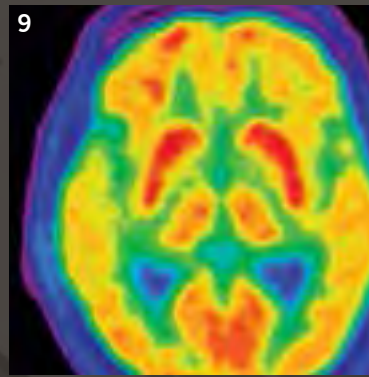
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## Battling Brain Disorders Through Research and Education

Irwin Kishner and Jeanne Greenawalt are passionate about the research of brain disorders. The couple chose to undergo a battery of assessments, including brain scans and a visit to Gabriel Léger, MD, and Sarah Banks, PhD, at Cleveland Clinic Lou Ruvo Center for Brain Health. While learning they didn't meet the criteria for the first clinical trial they explored, they were pleased to discover they don't have Alzheimer's disease and look forward to future trial participation.

The couple then decided to tackle brain research another way: by making a donation to the Lou Ruvo Center for Brain Health to support physician education and conferences, and by including additional gifts as part of their estate planning.

"My son has multiple sclerosis, but he's recently been responsive to new treatment. I thank Dr. Timothy West for giving my son and his family their life back," says Ms. Greenawalt. "I felt a responsibility to give

back so Cleveland Clinic can continue to help other families, too."

"Alzheimer's' and 'MS' are merely words until they come alive because of people you know," says Mr. Kishner. "Thanks to Drs. Léger and Banks and the entire staff, I believe the Lou Ruvo Center for Brain Health is on a mission, and I want to join you."

Where will that mission lead? The couple's answer: "We hope that education and research will lead to prevention."

*Bill Edwards*  
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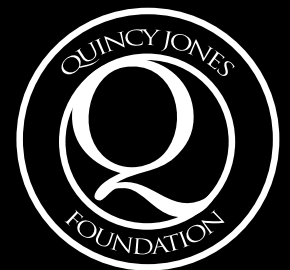
# THANK YOU!

A sincere thank you to our sponsors for joining



in celebrating Quincy Jones' and Sir Michael Caine's 80th birthday at the 2013 Power of Love gala.

You ignite the action that makes Keep Memory Alive sing.



# 80 Years Young:

## Quincy Jones and Sir Michael Caine Raise Awareness and Funds for Cleveland Clinic



Some of the biggest names in the entertainment industry gathered April 13 to celebrate the 80th birthday of Quincy Jones and Sir Michael Caine at the Power of Love™ gala. The star-studded event raised funds for Cleveland Clinic Lou Ruvo Center for Brain Health and its fight against degenerative brain disorders such as Alzheimer's, Huntington's, and Parkinson's diseases and multiple sclerosis.

Highlights from the 2013 gala included a heartfelt musical tribute from Chaka Khan, Bono singing Frank Sinatra, hysterical stand-up comedy from Chris Tucker, and nostalgic remarks about the guests of honor from Whoopi Goldberg. Greg Phillinganes, Marcus Miller, Paulinho Da Costa, Tom Scott, and Vinne Colaiuta gave a wonderful jazz performance. At the end of the evening, Stevie Wonder led a "Happy Birthday" serenade to Mr. Jones and Sir Michael Caine, followed by an awe-inspiring performance of "We Are the World" by the entire celebrity lineup.

Celebrity supporters who attended the annual event included music and film luminaries:

Amy Poehler	Jennifer Hudson
Alfredo Rodriguez	Jordin Sparks
Andreas Varady	Larry King
Arsenio Hall	Nikki Yanofsky
Bebe Winans	Patti Austin
Blush	Rashida Jones
Carlos Santana	Siedah Garrett
Herbie Hancock	Snoop Dogg
Emily Bear	(aka Snoop Lion)
James Ingram	will.i.am
Jason Derulo	Will Smith

The evening included a celebrity chef-packed dinner prepared by award-winning chefs Gordon Ramsay and Wolfgang Puck. Our gala guests enjoyed a wonderful evening of entertainment and fine dining, knowing their support raised millions of dollars for the Lou Ruvo Center for Brain Health.

### Interested in our events?

You may register online at [keepmemoryalive.org](http://keepmemoryalive.org) for the gala and other Keep Memory Alive events throughout the year. Please contact us anytime at [events@keepmemoryalive.org](mailto:events@keepmemoryalive.org) or 702.331.7045.



The Power of Love™ gala raised funds for Cleveland Clinic Lou Ruvo Center for Brain Health and its fight against degenerative brain diseases such as Alzheimer's, Huntington's and Parkinson's diseases and multiple sclerosis.



left: President of Iceland Olafur Grimmson and First Lady Dorrit Moussaoeff

above: Sir Michael Caine and Steve Schirripa

# A Design for Mindful Living



After attending the April 2012 “Brain Demystified” community education event presented by Cleveland Clinic Lou Ruvo Center for Brain Health, Professor Attila Lawrence had a brainstorm of his own: Have students in the University of Las Vegas Nevada School of Architecture design housing for seniors with neurodegenerative diseases, with the Lou Ruvo Center for Brain Health serving as medical consultant.

“I realized that there is a whole segment of the population that should have more attention from the design profession. This is especially important in Nevada, where the senior population has grown more than 50 percent in the last decade,” says Professor Lawrence, who teaches interior architecture and design.

Director Jeffrey L. Cummings, MD, ScD, and Education in Neurodegeneration (EiN) Director Dylan Wint, MD, of the Lou Ruvo Center for Brain Health met with UNLV

School of Architecture representatives, and the two organizations agreed to work together on the design project.

Members of the Lou Ruvo Center for Brain Health’s EiN program managed the implementation of the project. “This is the kind of project we want to encourage. Many of our patients live in housing that doesn’t accommodate their needs. They would have less need for medical care if they lived in properly designed environments,” says Dr. Wint.

“We feel a strong commitment to our community to provide whatever services we can. We knew we could connect the students with the information they needed to design the housing,” says Susan Farris, MEd, EiN Coordinator.

Over four meetings with Lou Ruvo Center for Brain Health neurologists, psychiatrists, and neuropsychologists, the students learned what to consider in designing housing for seniors with neurodegenerative diseases such as Parkinson’s disease and Alzheimer’s disease. For instance, people with Parkinson’s disease have difficulty navigating tight spaces, and need wide entrances and hallways.

“It was a wonderful new experience for the students. The physicians engaged us in conversation and made a wealth of information accessible for us,” says Professor Lawrence.





“...There is a whole segment of the population that should have more attention from the design profession. This is especially important in Nevada, where the senior population has grown more than 50 percent in the last decade.”

— Attila Lawrence, UNLV

The students presented their completed designs at a meeting at the Lou Ruvo Center for Brain Health. “They created beautiful living spaces that aren’t institutional, and accommodate people with cognitive and physical disabilities,” says Dr. Wint. To help people with Alzheimer’s disease recognize their apartments, the students suggested placing a favorite photo or picture on the door.

The two organizations have already begun work on another design project.

**For information on the Lou Ruvo Center for Brain Health’s Education in Neurodegeneration program, please contact Susan Farris at 702.778.7006 or [farriss@ccf.org](mailto:farriss@ccf.org).**





Dementia is commonly thought of as a disease of the elderly. While decline in brain function is most prevalent among people older than 65, it can also strike individuals in middle age. People with early-onset dementia are often misdiagnosed until the true cause of their symptoms is identified.

## Early-Onset Dementias Program Serves Patients Stricken with Brain Diseases at Younger Ages

Cleveland Clinic Lou Ruvo Center for Brain Health launched the Frontotemporal and Early-onset Dementias Program to provide accurate diagnosis and dedicated services to people with frontotemporal dementia (FTD) and early-onset Alzheimer's disease.

"These conditions are among the most complex that we see at the center, and take considerable time and resources to diagnose and treat. We provide a place where patients and families can get the attention they need," says Gabriel Léger,

MD, Director of the Frontotemporal and Early-onset Dementias Program.

FTD is the most common form of dementia in people under 60, affecting the parts of the brain — the frontal and temporal lobes — that are associated with organizational ability, decision-making, judgment, self-control, emotional responsiveness, and language ability and comprehension. Some FTD patients develop movement disorders that resemble Parkinson's disease.

FTD causes people to behave in unusual ways: They may be rude and impulsive or listless and passive. They may lack judgment, lose their capacity for empathy, and have strong cravings for particular foods, especially sweets. A patient with FTD showed little empathy when her husband developed a terminal illness, instead complaining that he "wasn't fun anymore."

Early-onset Alzheimer's disease can have different initial symptoms than later-onset Alzheimer's, often affecting visual/spatial function rather than memory. People may have difficulty, for example, locating objects or navigating a car through traffic. They may also have impaired language ability. Developing dementia at an early age can be particularly devastating, because it affects people when they are actively involved in pursuing their careers and raising children.

Gabriel Léger, MD



Sarah Banks, PhD



“The parent who was the family breadwinner may be unable to work, the marriage may break down completely, or the partner will become a caregiver at a young age. Children can find it hard to cope with the parent’s sudden change in behavior,” says Sarah Banks, PhD, Head, Neuropsychology Program, and member of the Frontotemporal and Early-onset Dementias Program team.

The Frontotemporal and Early-Onset Dementias Program offers a wide range of services:

**Clinical Diagnosis**

Neurological evaluation, state-of-the-art neuroimaging techniques such as PET and MRI scans, comprehensive neuropsychological assessments and genetic counseling aid in diagnosis.

**Treatment**

Treatment is individualized according to the patient’s needs and can include medication, speech therapy, physical therapy and occupational therapy.

**Social Services**

A social worker who understands early-onset dementias can assist in addressing issues that may arise, such as identifying

supportive services and community resources. Counseling and support groups are also available to help individuals and families cope with the emotional and social impact of the disease.

**Research**

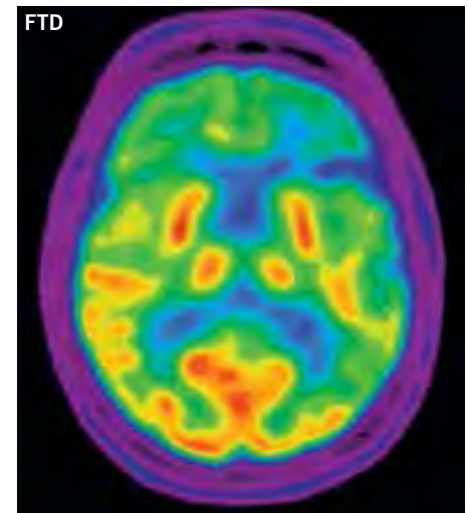
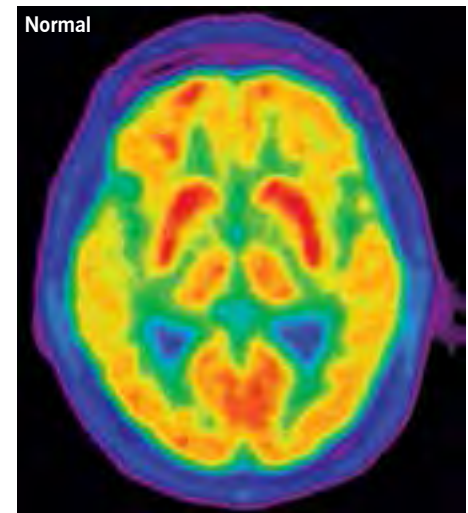
Drs. Léger and Banks recently completed a study of FTD focused on the link between changes in behavior and the underlying changes taking place in the brain. They are planning two new research studies. As clinical trials become available for FTD and Alzheimer’s disease, patients will be offered opportunities to participate.

**Education**

Educating the public and medical professionals about early-onset dementias is an integral part of the program’s mission. The Lou Ruvo Center for Brain Health houses a lending library to provide patients and families with helpful information when an early-onset dementia is diagnosed and over the course of the disease.

The Lou Ruvo Center for Brain Health’s Dementia 2013 conference featured presentations on early-onset dementias by Dr. Léger, and on FTD by Bruce L. Miller, MD, Director of the Memory and Aging Center at the University of California San Francisco.

“We are very grateful to supporters Irwin Kishner and Jeanne Greenawalt for their gift that enables us to offer these important educational events,” says Dr. Léger.



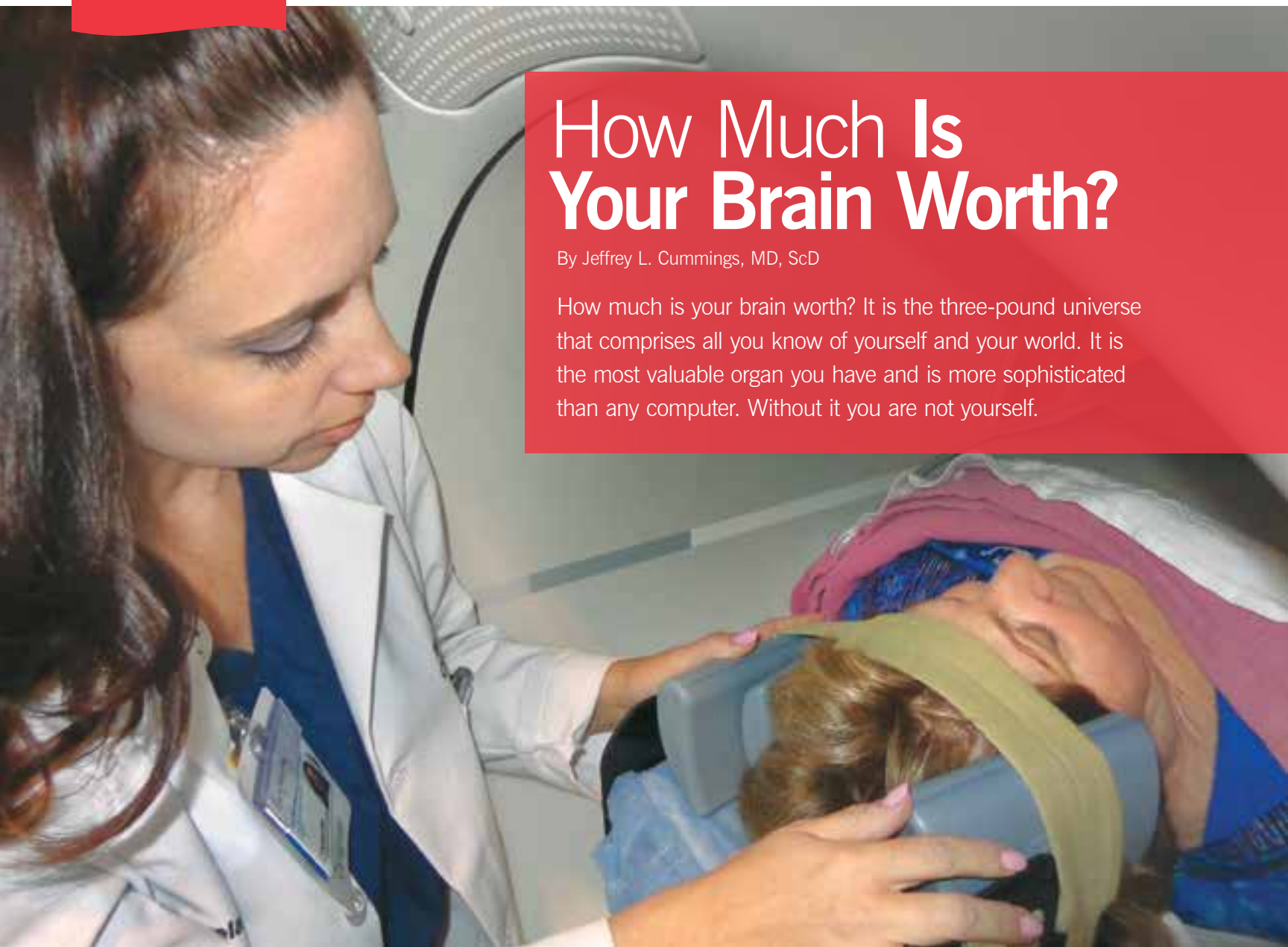
Positron Emission Tomography (PET) with a labeled sugar molecule (FDG or Fluorodeoxyglucose) allows us to visualize which parts of the brain are active. In these images, the “hotter colors” (yellow and red) indicate high brain activity in the normal control, while “cooler” colors (green and blue) represent regions with reduced activity in the top (frontal) regions of the patient with FTD.

To make an appointment, please contact us at 702.483.6000. For information on available clinical trials, please contact Samuel Hickson at 702.685.7073 or brainhealth@ccf.org. Visit us online at clevelandclinic.org/BrainHealthTrials for a complete list of clinical trials.

# How Much Is Your Brain Worth?

By Jeffrey L. Cummings, MD, ScD

How much is your brain worth? It is the three-pound universe that comprises all you know of yourself and your world. It is the most valuable organ you have and is more sophisticated than any computer. Without it you are not yourself.



More than 5 million Americans are not the same vibrant mothers and fathers, sisters and brothers they once were because their brains have been damaged and their memories stolen by Alzheimer's disease. By 2025, their ranks could grow 40 percent — to 7 million — according to the Alzheimer's Association.

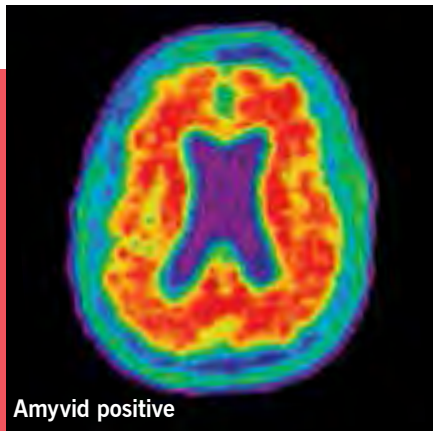
In the ongoing battle against Alzheimer's, researchers have developed a new type of brain scan that can detect brain plaques characteristic of the disease. The scanning technique capitalizes on a remarkable ability to use small doses of radioactive

chemicals that will “stick” only to Alzheimer plaques in the brain. A positive scan in a patient with memory loss strongly supports the diagnosis of Alzheimer's, whereas a negative scan signifies it is virtually impossible for Alzheimer's to be the cause of memory symptoms. The scan is a giant step toward improving the accuracy of diagnosis of patients with memory loss.

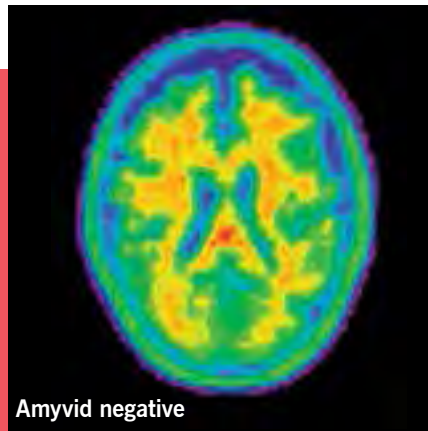
New technology is expensive. The scan, known as amyloid brain imaging, costs several thousand dollars, and the Centers for Medicare and Medicaid Services (CMS) is deliberating whether to reimburse the

cost. Without reimbursement, this advanced and useful technology will not be widely available to patients with memory symptoms.

Amyloid imaging is based on an improved understanding of Alzheimer's disease, stemming largely from tax-supported research. Taxpayers support the National Institutes of Health, which advances research; companies use the information to build new devices or produce new drugs; taxpayers get new products for diagnosis and treatment. The price of these advances is high initially and declines with time. This



**Amyvid positive**



**Amyvid negative**

*left: Amyvid positive, meaning amyloid protein is present in the brain  
right: Amyvid negative, meaning no amyloid has been detected in the scan*

cycle of discovery has dramatically decreased disease and increased the human lifespan. But why would we want a lifespan that exceeds our brain span? The point of living longer is to enjoy life. Accurately diagnosing those with Alzheimer's and those with reversible mimics of Alzheimer's is critically important.

Amyloid imaging raises challenging new issues. The scan is positive in about 30 percent of cognitively normal older persons. These individuals have Alzheimer pathology in the brain, but no cognitive symptoms. Does this mean the scan is not useful? No. Some people with positive scans will never develop clinical manifestations of the disease, but most will. The Food and Drug Administration does not recommend the scan for those without symptoms, and clinicians are not requesting that CMS approve it for this purpose.

Patients with very mild symptoms, those with unusual cognitive symptoms, and those with very early onset of symptoms are the most difficult to diagnose. In these circumstances, amyloid imaging could be most helpful, and CMS is being asked to reimburse the costs.

Why diagnose Alzheimer's if nothing can be done? We have no therapies that slow the disease process, so why would you want to know if you have Alzheimer's? The information is important because 50 percent of

those with mild memory loss do not have Alzheimer's and 20 percent of those with more disabling symptoms, diagnosed with Alzheimer's dementia on the basis of clinical assessments, have some non-Alzheimer condition that needs attention.

Those without Alzheimer's often have reversible causes of memory loss. Those with Alzheimer's can be started on the available medications, and patients and families can be counseled properly regarding prognosis. Well-diagnosed patients can participate in clinical trials, contributing to the development of better therapies.

Avoiding an early, accurate diagnosis of Alzheimer's is not an acceptable option and does not serve the patient's interests. Surely, this new technology that promises to help us diagnose complex neurological conditions should be made available and reimbursed by CMS. After all, how much is a brain worth?

**ABOUT THIS ARTICLE:**

**Jeffrey L. Cummings, MD, ScD, Director, Cleveland Clinic Lou Ruvo Center for Brain Health, authored this opinion piece championing amyloid imaging, which ran in the *Washington Examiner* on May 19, 2013. To make an appointment for a brain scan at the Lou Ruvo Center for Brain Health, please call 888.370.8933 or visit us online at [clevelandclinic.org/brainhealth](http://clevelandclinic.org/brainhealth) to learn more.**



# Does Starting Sports Early Affect **Brain Health?**

Many youths begin playing sports at a young age, which raises concerns that some may be vulnerable to brain injury with both immediate and long-term consequences occurring in a few. Investigators at Cleveland Clinic Lou Ruvo Center for Brain Health recently presented preliminary findings germane to the issue of early head trauma.

Repetitive blows to the head can result in injury to the brain and are a risk factor for developing a progressive neurological condition termed chronic traumatic encephalopathy (CTE). One of the most common settings for sustaining cumulative head trauma is organized sports — not only the obvious ones, such as football, boxing, mixed martial arts, and hockey, but also activities such as rodeo and ice skating.

We know little about the long-term effect of sports-related repeated head trauma in children and adolescents. Younger athletes may be more susceptible to the effects of injury because the brain is still developing, or they may be less susceptible because the brain is better able to compensate.

Using data from the Professional Fighters Brain Health Study (PFBHS), a project that follows active and retired boxers and mixed martial arts fighters annually, a research team at the Lou Ruvo Center for Brain Health found that in some who began fighting before age 15, brain volumes in certain areas were smaller than in those who began fighting later in life. Similarly some who began fighting at age 12 or younger had greater disruption of the nerve fibers that link the two sides of the brain than did fighters who started after age 12.

“Our results, while preliminary, provide insight into some of the factors affecting brain health in fighters,” noted PFBHS Director Charles Bernick, MD, who presented the information at the Alzheimer’s Association International Conference in Boston. “Though there are a number of limitations in interpreting our results, ours is the first report on how the age of commencing a contact sport might affect brain structure.”

Clearly, more research is needed to extend and interpret these provocative observations, and Cleveland Clinic is actively involved. Perhaps the most valuable information to be learned from the PFBHS will come from continuing follow-up of the fighters as they age. In addition, the Cleveland Clinic Concussion Center — a collaboration among experts in the Neurological Institute, the Orthopaedic & Rheumatologic Institute, Cleveland Clinic Children’s, and Lerner Research Institute — is developing new techniques so that children can benefit from sports while staying safe.

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**For more information on the Professional Fighters Brain Health Study, please contact Triny Cooper at 702.675.5237. To learn more about CTE, visit us at [clevelandclinic.org/brainhealth](http://clevelandclinic.org/brainhealth).**

*top: Diego Magdaleno participates in the Professional Fighters Brain Health Study  
middle: James Quick Tillis (R), a study participant, and Earnie The Acorn Shavers  
bottom: Mia St John (R), a study participant, fights Christy Martin*



Photo courtesy of Diego Magdaleno

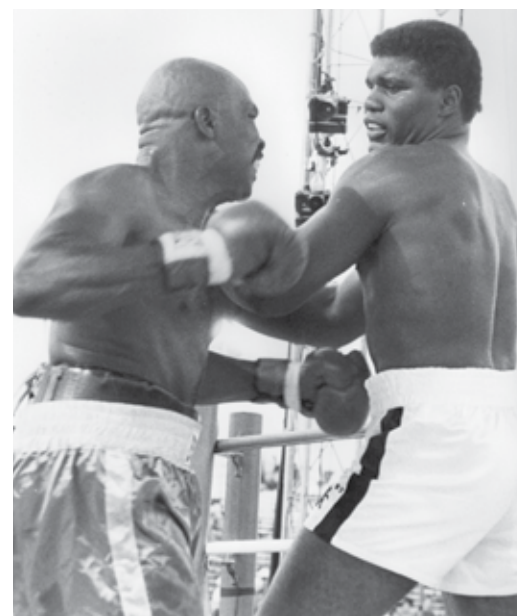


Photo courtesy of Vanessa and James Tillis



Photo by Mary Ann Owen

# Clinical Trials: Innovations to Advance Drug Treatment

The prevalence of Alzheimer's disease (AD) is rising rapidly. The global population is aging and the frequency of AD doubles every five years after age 65. Current treatments provide modest improvement in symptoms and a temporary delay in decline. Disease-modifying therapies are urgently needed to combat this mind-robbing disease.

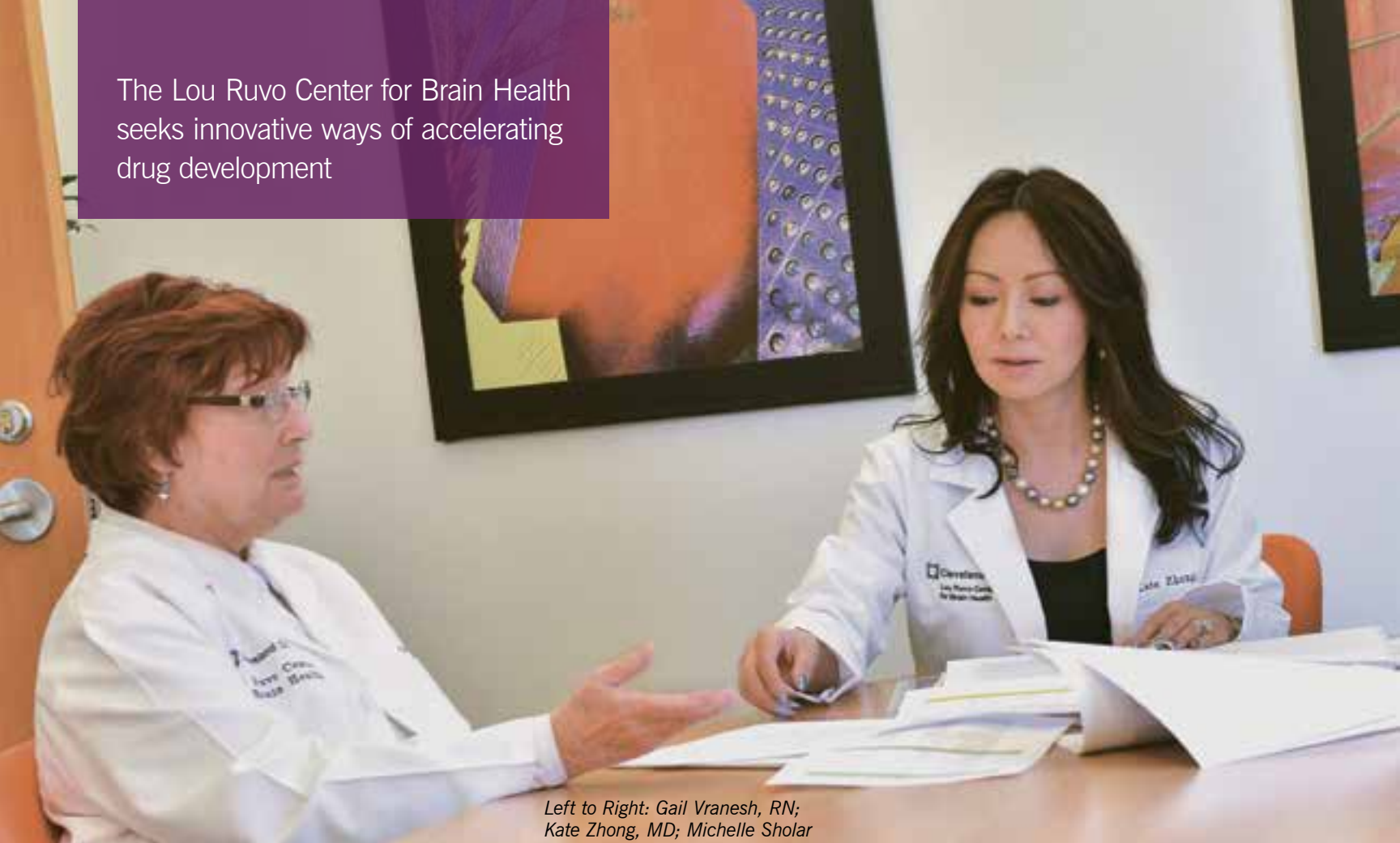
Cleveland Clinic Lou Ruvo Center for Brain Health is conducting a novel clinical trial using the first medical device approved in Europe to treat Alzheimer's disease patients (see sidebar on page 18).

"We are very excited to bring this device to the United States, where we are the first and only center to start this project that may lead to approval from the Food and Drug Administration, thus bringing safe and effective treatment to our patients," says Kate Zhong, MD, Senior Director of Clinical Research and Development.

*Kate Zhong, MD, leads Cleveland Clinic Lou Ruvo Center for Brain Health's clinical trials team.*



The Lou Ruvo Center for Brain Health seeks innovative ways of accelerating drug development



Left to Right: Gail Vranesh, RN; Kate Zhong, MD; Michelle Sholar

The device combines repetitive transcranial magnetic stimulation and tailored cognitive training. Like all therapies, it must be tested in clinical trials before receiving FDA approval for the general population. Clinical trials are the only pathway leading to new treatment.

With a passion for discovery and a commitment to bringing the best treatments to patients, Dr. Zhong leads the Lou Ruvo Center for Brain Health's research

team in conducting urgently needed clinical trials to advance early detection and treatment for Alzheimer's disease, Parkinson's disease, multiple sclerosis and other neurodegenerative disorders.

The Lou Ruvo Center for Brain Health recently completed a groundbreaking clinical trial to develop a new blood test for Alzheimer's disease. It was the only site in the United States selected to participate.

With more than 30 trials conducted, the Lou Ruvo Center for Brain Health has one of the largest and most active trials programs in the country. Employing a "multiple shots on the goal" philosophy, the research team tests many drugs to identify those few that may have beneficial clinical effects.

The novel organization of the Cleveland Clinic Alzheimer's clinical trials consortium includes multiple trial sites at Cleveland Clinic in Las Vegas; Cleveland and Lakewood, Ohio; and Weston, Florida. In addition, Cleveland Clinic is consulting on a new clinical program in Beijing, China, and clinical trials may be conducted there.

The Lou Ruvo Center for Brain Health seeks innovative ways of accelerating drug development. One method is the use of agents approved for other conditions to treat AD. This approach is called "repurposing." Exploring the therapeutic utility of

#### CURRENT CLINICAL TRIALS

Study Name	Type of Participant	Investigational Drug/Device	Study Duration
Avanir	Alzheimer's with Agitation	Neudexta (oral tablet)	10 weeks
BEAT-AD	Alzheimer's	Bexarotene (oral tablet)	10 weeks
Blaze	Alzheimer's	Crenezumab (injection)	18 months
Chair	Alzheimer's	NeuroAD Chair (device)	6 weeks
Nourish	Alzheimer's	AC-1204 (powder shake)	26 weeks
Assess	multiple sclerosis (MS)	Fingolimod/Glatiramer (injection and oral tablet)	52 weeks
Moderato	Parkinson's	Rasagiline (oral tablet)	24 weeks
Tomorrow	Cognitively Normal	AD-4833 SR (oral tablet)	5 years





repurposed agents shortens drug development time and may speed new treatments to patients. Biomarkers can also accelerate drug development. Using the Lou Ruvo Center for Brain Health's MRI and PET scan facilities to assess the biological effects of new drug therapies is one means of detecting drug effects more quickly.

Improving the methodology for all clinical trials is an important aim of the Lou Ruvo Center for Brain Health. Through study of new approaches, the center is transforming the global clinical trial enterprise.

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**For more information on clinical trials, please contact Samuel Hickson at 702.685.7073 or [brainhealth@ccf.org](mailto:brainhealth@ccf.org). Visit us online at [clevelandclinic.org/BrainHealthTrials](http://clevelandclinic.org/BrainHealthTrials) for a complete list of clinical trials.**



*top: Kate Zhong, MD, with the chair device*

*bottom: Research coordinator takes blood from a clinical trial participant*

left: Harvey and Jane Levy

right: Nuclear PET-CT Technologist Elaine Pienschke guides clinical trials participant Harvey Levy into the PET scanner



## Skin Cancer Drug May Help Treat Alzheimer's Disease

It may sound surprising that a drug used to treat cancer could also be effective in treating Alzheimer's disease. But in a recent study, mice genetically engineered to produce amyloid, a protein that accumulates in the brain in Alzheimer's disease, showed a dramatic reduction in amyloid levels within days of taking the cancer drug bexarotene.

Cleveland Clinic Lou Ruvo Center for Brain Health is conducting the first human clinical trial of Bexarotene to determine if it can reduce amyloid in the brains of Alzheimer's disease patients. Bexarotene is FDA-approved to treat skin lymphoma, a type of cancer.

Twenty people aged 50 to 90 with mild to moderate Alzheimer's disease are expected to participate in the eight-week trial. One of the participants is Harvey Levy, 69, a retired electrical contractor from Henderson, Nevada. After a few years of experiencing difficulties with his memory and speech, Mr. Levy, who was

known as a forceful, articulate speaker, came to the Lou Ruvo Center for Brain Health in February 2012 and was diagnosed with Alzheimer's disease.

When Mr. Levy heard about the clinical trials offered at the Lou Ruvo Center for Brain Health, he thought "it would be great to try one." With a family history of Alzheimer's disease and three sons who might inherit the disease, Mr. Levy was motivated to help find an effective treatment. He chose to participate in the bexarotene trial because the drug is approved and, if it proves effective, he can continue to take it.

Trial participants undergo regular evaluations, including brain scans, clinical tests, and neuropsychological assessments. "The people at the center have been spectacular. They take beautiful care of you and make the trial as pleasant as possible," says Jane Levy, Harvey's wife.

Mr. Levy hopes the drug helps so he can maintain his active, independent lifestyle: taking long walks, dining out, going to the theater, and traveling. "I want to do everything I can to keep the disease from progressing," he says.

### Interested in Participating?

For more information on clinical trials, please contact Samuel Hickson at 702.685.7073 or [brainhealth@ccf.org](mailto:brainhealth@ccf.org). Visit us online at [clevelandclinic.org/BrainHealthTrials](http://clevelandclinic.org/BrainHealthTrials) for a complete list of clinical trials.

Research such as Bexarotene is made possible by generous funding. If you would like to support our research programs, please contact Senior Director of Development Laura Fritz at 702.331.7052.

# Using Brain Stimulation to Improve Hand Function in Parkinson's Disease

What if you struggled with a task as routine as buttoning your shirt each morning? Many individuals with Parkinson's disease know that frustration all too well. Now, with support from the Michael J. Fox Foundation for Parkinson's Research, a study at Cleveland Clinic Lou Ruvo Center for Brain Health is evaluating a treatment that stimulates the brain to improve hand function in people with Parkinson's disease.

Using brain stimulation to treat neurodegenerative diseases is generating considerable interest in the neurology community. The Lou Ruvo Center for Brain Health is at the forefront in investigating this technique, with two studies under way (see sidebar on Alzheimer's disease).

The focus of the hand function study is transcranial direct current stimulation (tDCS), a noninvasive, painless treatment that uses electric current to stimulate specific areas of the brain. The current is delivered by a small, inexpensive device a little larger than a cellphone. In studies, tDCS has been shown to improve motor function in patients with Parkinson's disease as well as in stroke patients and older adults.

"These studies provide evidence that tDCS could be effective in the treatment of Parkinson's disease," says Brach Poston, PhD, Project Scientist at the Lou Ruvo Center for Brain Health, who is leading the study. The study is comparing the effective-

ness of different ways of administering tDCS: before and while performing a task that tests hand function. The goal is to determine the best approach for using tDCS to optimize hand function. Participants are being evaluated over three sessions.

Collaborating with Dr. Poston on the study is Ryan Walsh, MD, PhD, Director of the Lou Ruvo Center for Brain Health's Parkinson's Disease and Movement Disorders Program, who recruited study participants and is conducting clinical evaluations.

If tDCS can improve hand function by 20 to 30 percent, it could enable Parkinson's disease patients to more easily perform everyday activities and be more independent. Someday, these patients may be able to administer the treatment themselves using a home device.

"tDCS is safe, practical, and easy to use. It has the potential to become a new therapy option that complements other treatments for Parkinson's disease," says Dr. Poston.



*Brach Poston, PhD, connects research study participant Ed Schreiber to the transcranial direct current stimulation device.*

## MORE INFORMATION

Interested in these or other research trials at Cleveland Clinic Lou Ruvo Center for Brain Health? Please contact Samuel Hickson at 702.685.7073 or [brainhealth@ccf.org](mailto:brainhealth@ccf.org). Visit us online at [clevelandclinic.org/BrainHealthTrials](http://clevelandclinic.org/BrainHealthTrials) for a complete list of clinical trials.

## Brain Stimulation in Alzheimer's Disease

Brain stimulation may also help improve brain function in patients with Alzheimer's disease. Another Cleveland Clinic Lou Ruvo Center for Brain Health study is evaluating the NeuroAD system, which combines computerized cognitive testing with a different type of stimulation, repetitive transcranial magnetic stimulation (rTMS).

Applied repetitively to the brain, rTMS has positive effects on the pathways that contribute to memory and learning. Study participants are Alzheimer's disease patients aged 60 to 90, who are tested in a six-week trial.



## Multiple Sclerosis Program Expands at an Opportune Time

Thanks to a generous grant from the Conrad N. Hilton Foundation, the Cleveland Clinic Mellen Program for Multiple Sclerosis at the Lou Ruvo Center for Brain Health, Las Vegas has been building a comprehensive program comprising education, counseling, a dedicated medical team and research. The program provides on-site infusion treatments and employs advanced neurodiagnostic tools.



*Clinical social worker Joanne Fairchild volunteers as an equine therapist at Marquis Care at Centennial Hills*

To meet the ever-growing demand for medical care and social services, the program added two new staff members: a multiple sclerosis (MS) specialist, Le Hua, MD, and a clinical social worker, Joanne Fairchild, LCSW (see facing page for profiles). They join MS Program Director Timothy West, MD; Physician Assistant Michelle Thompson, PAC; Melissa Ellis, RN; Medical Assistant Andrea Lopez; and Medical Secretary Maria Schmidt. Dr. West, Andrea Lopez, and Maria Schmidt are fluent in Spanish, which “expands our ability to serve the region’s large non-English speaking patient population,” says Dr. West.

With the addition of Dr. Hua, the program is implementing an ambitious research effort and is conducting its first clinical trial. “We want to find new ways to understand the illness and new ways to treat patients,” says Dr. West.

The program has expanded at an opportune time; in the past year, two new oral MS medications, Tecfidera and Aubagio, received Food and Drug Administration approval. Cleveland Clinic Mellen Center for Multiple Sclerosis Treatment and Research in Cleveland led one of the Tecfidera clinical trials.

“Both medications are very important additions to our ability to treat MS patients,” says Dr. West. In the coming year, three additional medications are expected to be approved. “The more treatments we have, the more likely we are to find treatments that work for each patient. If we can treat MS early enough, we can enable patients to live a good life. That’s what we’re fighting for.”

Future plans are to “keep growing, care for more patients, and advance scientific knowledge of MS. The Hilton Foundation grant makes this possible,” says Dr. West.

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**If you are interested in making an appointment with a member of the Lou Ruvo Center for Brain Health’s MS team, please contact us at 702.483.6000.**

left to right: Timothy West, MD, Melissa Ellis, RN, Andrea Lopez and Michelle Thompson, PAC



Le Hua, MD with patient

“If we can treat MS early enough, we can enable patients to live a good life. That’s what we’re fighting for.” — Timothy West, MD

## PROFILES

### **Le Hua, MD, Neurologist**

Dr. Le Hua comes to the Mellen Program for MS at the Lou Ruvo Center for Brain Health after completing her fellowship in neuroimmunology and MS at the Barrow Neurological Institute and St. Joseph’s Hospital and Medical Center in Phoenix. Throughout her medical training, Dr. Hua had mentors who emphasized patient-centered care. “That’s what attracted me to the Lou Ruvo Center for Brain Health MS Program — the passion and dedication of the staff and focus on patients,” she says.

Dr. Hua was also attracted by the research opportunities at the Lou Ruvo Center for Brain Health. She has experience working on clinical trials and using advanced MRI neuroimaging to better understand cognitive functioning in MS, which she considers an understudied area.

“Dr. Hua brings compassion and excellent clinical and research skills. She will be instrumental in building our research program,” says Dr. West.

“It is an exciting time to work in the MS field,” says Dr. Hua. “In just the past few years, our understanding of the disease has grown, and many more effective therapies have and will become available.”

### **Joanne Fairchild, LCSW, Clinical Social Worker**

As a staff therapist at Harmony Health Care in Las Vegas, Joanne Fairchild worked with a wide range of patients, including people with MS and other autoimmune diseases. She became aware of the depression and isolation MS patients can experience. She also has

personal experience with the disease; a cousin with MS passed away at age 21.

Ms. Fairchild is excited to be working at the Mellen Program for MS at the Lou Ruvo Center for Brain Health: “The center offers the most advanced care for people with MS. I want to help patients have a better quality of life by providing therapy as an option to address the challenges they and their family members are facing as a result of their diagnosis,” she says.

“Joanne will be invaluable in addressing patients’ psychological needs and caring for family members,” says Dr. West.

Outside work, Ms. Fairchild is a certified equine therapist, and often brings her horses to the assisted living facility where she volunteers.

# Introducing Our Nurse Practitioners and Physician Assistant

At Cleveland Clinic Lou Ruvo Center for Brain Health, we take a team approach to patient care. Our neurologists provide initial appointments and diagnoses. Subsequently, patients interact with our physicians' care partners, nurse practitioners and physician assistants, who have more time to devote to patient needs and are in close daily contact with the physicians.

While our neurologists are always available, the team approach allows for the most intimate patient care, while making our physicians available to more patients.

We'd like to introduce our physicians' new care partners.



**Mary Gauthier, RN, MSN, FNP-BC**

Specialty: Parkinson's Disease and Movement Disorders

Mary Gauthier is a board-certified family nurse practitioner with 14 years' experience in internal medicine. Ms. Gauthier is adjunct faculty at the University of Nevada Las Vegas Department of Nursing and was runner-up for the 2011 Nevada March of Dimes Advanced Practice Nurse of the Year. An Indiana native, Ms. Gauthier completed her Bachelor of Science in nursing at Indiana University and her master's degree in nursing at UNLV in 1998.



**Samantha McLea, MSN, NP-C**

Specialty: Memory Loss and Alzheimer's Disease

Samantha McLea is a board-certified family nurse practitioner. She received her Bachelor of Science in nursing in 2004 from Western Michigan University, where she graduated magna cum laude. She had seven years' experience as a registered nurse prior to completing her Master of Science in nursing/family nurse practitioner at Western University of Health Sciences in 2012. She is a member of the American Academy of Nurse Practitioners and Sigma Theta Tau International Honor Society of Nursing.



**Michelle Thompson, PAC**

Specialty: Multiple Sclerosis

Michelle Thompson is a board-certified physician assistant. She has 13 years' experience in internal medicine, surgery, and pediatrics. Additionally, she practiced as a nurse for 10 years in both inpatient and outpatient hospital settings. Ms. Thompson is adjunct faculty at Union College and the University of Nebraska Medical Center. She completed her nursing degree and, subsequently, a Bachelor of Science in physician assistant studies in 2001 in her home state of Nebraska.

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**If you'd like to make an appointment with our clinical team, please contact Cleveland Clinic Lou Ruvo Center for Brain Health at 702.438.6000.**

# Doctor Couple Balances Work, Home and Three Children

For two dedicated physicians, having three children at home aged 6, 1, and newborn makes for a busy life. But for Ryan Walsh, MD, PhD, who directs the Movement Disorders Program at Cleveland Clinic Lou Ruvo Center for Brain Health, and his wife, Alexandra Walsh, MD, a pediatric oncologist with Comprehensive Cancer Centers of Nevada, this is the life they envisioned when they “fell in love at first sight” on a blind date.

In a relationship that began while he was a student in a National Institutes of Health doctoral program at the University of Cincinnati and she was pursuing a medical degree at Ohio State University College of Medicine, they’ve spent more than a decade honing that elusive work-life balance.

“We’re lucky to be able to talk through our challenges at work and as fellow doctors, and have a very good sense of what the other has been through,” Ryan Walsh says. “We both have to deal with insurance companies, evaluating the effectiveness and relevancy of drug options, unanticipated changes in patient condition, and so on.”

Since arriving in Las Vegas, Ryan Walsh is most proud of launching Nevada’s only Huntington’s Disease Comprehensive Clinic, which gives patients access to a neurologist, psychiatrist, and physical therapist in one location during a half-day block. Alexandra Walsh started a free survivor clinic for pediatric cancer patients and their families.

Just as the couple advises family caregivers of their patients on the importance of making time to care for one’s own health, so they try to follow their own advice. She enjoys yoga and the treadmill, while he enjoys running outdoors. They’re raising Liam, 6, to enjoy

an active lifestyle, including martial arts and scampering over rocks at Red Rock Canyon National Conservation Area.

In spring 2012, they adopted a daughter, Eva. A year later, their second son, Colin, was born.

Personal and professional lives are a juggling act for the Drs. Walsh. As Ryan Walsh says, “Things are always changing. We just keep talking and working to get it right.”



*A similar article ran in the  
Las Vegas Review-Journal on June 23, 2013*



“Walking across the room. Standing up from a chair. You never think about those things until you can’t do them,”

“Walking across the room. Standing up from a chair. You never think about those things until you can’t do them,” she says.

Growing up in Minnesota, Dr. Murphy enjoyed myriad endurance sports: running, cross country skiing, biking; swimming. Sports were gratifying and made her feel good about herself, her accomplishments, and her potential.

She recalls a time during high school when she was seeing a physical therapist for a sports injury. She asked him about his career path and he said it was a hard program, with a lot of math and science. “It was a challenge, as if he were testing me and telling me I wouldn’t be able to do it,” says Dr. Murphy.

Dr. Murphy spent the summer after her first year of college as a full-time caregiver for her grandmother with Alzheimer’s disease, which again exposed her to the benefits of physical therapy. In an elderly person, preventing falls is a critical goal.

Today, as a physical therapist, Dr. Murphy enjoys educating and coaching patients toward improved quality of life and safety.

A triathlete, Dr. Murphy has adjusted the duration, intensity, and distance of her own workouts as she trains. “As we age, we shouldn’t think, I can’t do it anymore. We have to think, what can I change to be successful at this activity?” she says.

## Meleah Murphy: Early Physical Therapy Can Slow the Downward Spiral

“What happens when people can no longer stand up from a chair?” Meleah Murphy, PT, DPT, asks rhetorically.

“They can’t get up to use the bathroom, so they always need someone nearby. They’re less likely to walk, so muscles get weaker. Balance and endurance decline. Soon, they can’t stand up long enough to prepare a meal. It becomes

too difficult to get out and seek social stimulation, so then there’s brain decline.”

A physical therapist at Cleveland Clinic Lou Ruvo Center for Brain Health, Dr. Murphy asserts that downward spiral can be minimized physical therapy up front, when that first problem begins.





## Exercise in Parkinson's Class

“The concept of ‘use it or lose it’ absolutely applies to individuals with Parkinson’s disease,” says Jennifer Nash, PT, DPT, Manager of Neurorehabilitation Services at Cleveland Clinic Lou Ruvo Center for Brain Health in Las Vegas.

People with chronic progressive neurologic disorders such as Parkinson’s disease face significant declines in mobility and activities of daily living, resulting in a loss of independence and compromised quality of life. Research indicates that regular participation in exercise and physical activity improves function and reduces disability in these patients. Unfortunately, patients often fail to exercise following discharge from individual physical therapy sessions, leading to resumption of a sedentary lifestyle and a worsening level of disability over time.

After receiving feedback from patients that exercising alone at home is a challenge, due largely to safety concerns or lack of motivation, Dr. Nash and her team of physical therapists started an exercise class for Parkinson’s patients in spring 2013 at the Lou Ruvo Center for Brain

Health. The purpose of the biweekly classes is to empower participants and offer socially enriching experiences, while increasing mobility and agility and decreasing fatigue and falls.

“I began vigorous exercise three years ago when I first was diagnosed with Parkinson’s, and I thought the class might be too elementary for me. Instead, I learned new exercises and stretches specific to Parkinson’s, and my balance, coordination, and confidence have vastly improved,” says Jim Nagourney. “The camaraderie within the group is great, and we quickly became friends and supporters.”

Taught by a team of physical therapists certified in neurologic and geriatric physical therapy, the class focuses on exercises that target impairments such as poor sensory integration, rigidity, reduced cognitive function, and impaired motivation.

“Our focus is on fitness and overall health. We are trying to slow motor deterioration with high-intensity training to prevent further impairments or loss of independence,” says Dr. Nash.

Or, as participant Charles Silverman puts it: “This is the first class that seems to make me feel good.”

### Parkinson’s Disease Exercise Class

Tuesdays and Thursdays  
11:15 a.m.–12:15 p.m.  
or 12:30–1:30 p.m.

Call: 702.483.6000 to reserve your place in the class.

Cost: \$80 a month (covers exercise twice a week for a month)

Facilitated by a Cleveland Clinic Physical Therapist, classes cover:

- High amplitude (large movements)
- High effort (continuous activity for 50-60 minutes)
- Rhythmic movements (repeated to increase participants’ opportunity to perform movements correctly)
- Boxing
- Stretching



Mel Jantzen and Jennifer Nash, PT, DPT



“I knew that by taking this position, I’d be surrounded by a passionate team dedicated to bringing new and innovative health care resources to Las Vegas.”

## Administrative Director Finds Deep Meaning in New Role

“The first time I walked through the doors of Cleveland Clinic, I immediately knew there was something special about this organization,” says Justin Schmiedel. “Everyone lives and breathes Patients First, which makes you feel part of a tremendous cause.”

Not an unexpected reaction for a man who pursued a Master of Business Administration in healthcare management because he “wanted to be in the business of helping people, not just making widgets or money.” After completing his administrative fellowship with Cleveland Clinic, Mr. Schmiedel was hired as the administrator for the Department of General

Surgery, where he focused on the clinical operations and practice development of more than 50 surgeons in 16 locations throughout Northeast Ohio.

Two years in, Mr. Schmiedel received a call regarding the newly created administrative director role for Cleveland Clinic Nevada. The more research Mr.

Schmiedel did on Cleveland Clinic Lou Ruvo Center for Brain Health — learning of its founding by Larry Ruvo, who lost his father to Alzheimer’s disease, and seeing the innovative work in clinical trials — the more he wanted to be a part of it.

“Larry Ruvo said his goal is to cure Alzheimer’s disease. I knew that by taking this position, I’d be surrounded by a passionate team dedicated to bringing new and innovative health care resources to Las Vegas,” says Mr. Schmiedel.

In his new role, Mr. Schmiedel will oversee the Lou Ruvo Center for Brain Health in Las Vegas and Elko and the Las Vegas urology practice acquired by Cleveland Clinic in spring 2013. He will also lead Cleveland Clinic’s investigation into further expansion in Nevada.

Since arriving in Las Vegas in July 2013, Mr. Schmiedel has pursued a goal to build upon the foundation laid over the past four years, continue to invest in the exceptional work force, and steward the Lou Ruvo Center for Brain Health as a premier center for brain health nationwide. He acknowledges that Nevada is a market where the Cleveland Clinic brand isn’t well known, “but we have this diamond in Las Vegas providing exceptional care to the community.

“I’m excited to be part of a center that’s in the forefront of treating, preventing, and curing the disease of the future,” adds Mr. Schmiedel.

Justin Schmiedel, welcome to the Lou Ruvo Center for Brain Health. We look forward to seeing where that future takes us all.



*Pockets Schultz boxes with Annette White while Jen Nash, PT, DPT, NCS, supervises*

MEET A VOLUNTEER:

## Pockets Nicole Schultz Connects With Patients and Her Future

An aspiring comedian pursuing a computer science degree at University of Nevada Las Vegas, Pockets Nicole Schultz recently secured her first paying job at age 18. As a barista at Starbucks, she says, “You make connections with customers, just like we connect with patients at Cleveland Clinic.”

In fact, it was her experience with patients as a volunteer at Cleveland Clinic Lou Ruvo Center for Brain Health that landed her the job, says Ms. Schultz. She explains that it’s the patients she most enjoys. She recognizes that many don’t have anyone to talk to on a regular basis, and she tries to change that, one patient at a time: “Recently, I was making appointment confirmation calls and a lady thanked me for taking extra time to just talk with her.”

Intrigued by the architecture of the Lou Ruvo Center for Brain Health’s Frank Gehry-designed headquarters and wanting to do “something to help people,” but not sure exactly what, Ms. Schultz inquired about volunteering. Two years in, she has worked in the library, in the clinic escorting patients to their medical appointments and, most recently, in the physical therapy department.

“The physical therapists are fantastic. They’re so young and smart. They work their patients really hard, make it fun, and produce amazing results,” says Ms. Schultz.

She greets patients in reception and escorts them to the physical therapy room. She enjoys serving as an exercise partner for patients, and says the best part is witnessing the progress as they hit new milestones in independence.

When a patient who had been in an older, traditional wheelchair finally received a new motorized chair, Ms. Schultz says, “I cried because I was so excited for her that she’d finally have increased mobility.”

Pockets Nicole Schultz respects how Cleveland Clinic puts patients first, but is quick to note how much volunteers are appreciated, too, citing the annual volunteer luncheon and a card to mark her 18th

birthday. While her interests span animal rights, stand-up comedy, and computer science, one thing is certain: She wants to continue to affiliate with organizations that are considered top workplaces. Today, Starbucks and Cleveland Clinic; after college graduation, she’s hoping for the Peace Corps or, possibly, Google.



*Volunteer Pockets Schultz helps Ronald Kay locate information on Alzheimer’s disease at the Lou Ruvo Center for Brain Health’s library*

**For information on volunteering at Cleveland Clinic Lou Ruvo Center for Brain Health, please contact Director of Volunteer Services Dee King at 702.331.7046 or [dking@keepmemoryalive.org](mailto:dking@keepmemoryalive.org).**

*left: Sarah Banks, PhD, Head of Neuropsychology, Cleveland Clinic Lou Ruvo Center for Brain Health, addresses Lunch and Learn attendees*

*right: Lisa Browder of Nathan Adelson Hospice presents on reflexology and massage*



## Lunch & Learn: Bring a Lunch; We Deliver the Learning

Every Wednesday, patients, caregivers, and family members gather at Cleveland Clinic Lou Ruvo Center for Brain Health to participate in the Lunch & Learn program, share a smile with old and new friends, and learn ways to handle challenging situations and increase knowledge to support themselves and those they love who are dealing with a brain disorder.

Lunch & Learn is just one of the many ways the Lou Ruvo Center for Brain Health serves as a connection point for patient and family education. Since its inception in March 2010, Lunch & Learn participation has exceeded 5,000 visits.

Open to the public and free of charge, Lunch & Learn covers myriad topics ranging from disease-related information to legal and financial matters, health and wellness, and updates on the latest research findings. Some of the most popular programs have been expert presentations by the center's doctors, cooking demonstrations with local chefs, and

authors sharing their stories. Lunch & Learns routinely explore issues that can be difficult for individuals and families to deal with, such as when to stop driving, how to keep a loved one safe, and how to cope with grief and loss.

Participants frequently say how much they appreciate the information and the warm, welcoming environment. This wonderful feedback affirms that Lunch & Learn is yet another Lou Ruvo Center for Brain Health program making a difference in the lives of our patients, their families, and the Nevada community.

Please join us at an upcoming Lunch & Learn. Noon – 1 p.m. Wednesdays at Cleveland Clinic Lou Ruvo Center for Brain Health in Las Vegas. No reservations necessary. Feel free to bring your lunch; dessert and bottled water will be provided.

Lunch & Learn is available via videoconference technology in select Nevada communities.

To learn about upcoming Lunch & Learn topics or to inquire about the location nearest you, please contact Susan Solorzano at 702.483.6055 or [solorzs@ccf.org](mailto:solorzs@ccf.org). Or, visit our program calendar online at [keepmemoryalive.org/socialservices](http://keepmemoryalive.org/socialservices), where materials from select Lunch & Learn programs are archived.



## An Afternoon of Music and Memories

Music has long been recognized as a powerful tool for impacting mood and stimulating memories. Research has begun to shed light on music's positive effects on individuals with memory disorders. For them and their families, musical programs can serve as respite from the traditional caregiver/patient roles and provide options for sharing pleasant experiences together.

On Mother's Day weekend, Cleveland Clinic Lou Ruvo Center for Brain Health partnered with the Smith Center for the Performing Arts Education and Outreach Department to offer a special family music program in a warm, welcoming environment at the Keep Memory Alive Event Center. More than 200 individuals, caregivers, and family members participated in "An Afternoon of Music & Memories." The concert, featuring Lady J and the Fireballs, used familiar music and audience interaction to engage attendees.

Sponsored with a generous contribution from the Donald W. Reynolds Foundation,

the program received overwhelmingly positive reviews, with heartwarming sentiments such as "Thank you for this special gift," "It made me cry to see my mom react so well," and "It was a wonderful opportunity to spend an afternoon with my mother doing something she enjoyed."

Such pleasant experiences can enhance quality of life and help to strengthen family bonds, especially in challenging times. The smiles on the faces of attendees affirmed that "An Afternoon of Music & Memories" was truly a special event — one that will be remembered.



**To join our mailing list and learn about no-cost programs open to the community, please contact Susan Solorzano at 702.483.6055 or [solorzs@ccf.org](mailto:solorzs@ccf.org). Or, visit our program calendar online at [keepmemoryalive.org/socialservices](http://keepmemoryalive.org/socialservices).**

MEET A DONOR:

## Jerry Snyder, KMA Board Member

With his law degree from the University of California, Berkeley, in hand, Jerry Snyder arrived in Las Vegas in 1964 with abundant enthusiasm for making the city a great place to live. As one of the founding partners of Palace Station, he exited the practice of law and answered naysayers' skepticism about market demand for an off-Strip casino by breaking ground to expand the property only six weeks after its July 1976 grand opening.



*Jerry and Diane Snyder*

While cynics labeled his adopted hometown a cultural wasteland, Mr. Snyder focused on fundraising to establish the city's first venue for the performing arts, the Meadows Theater at the University of Nevada Las Vegas. In addition to supporting the Boys & Girls Club, he joined Gov. Jim Gibbons' Sage Commission, a task

force so successful in eliminating waste from government that it was copied in New York and beyond. Mr. Snyder is presently in his seventh year serving in the diplomatic corps as honorary consul to the United Kingdom, with responsibilities that include bringing businesses from the U.K. into Nevada.

Jerry Snyder attributes much of his success in business and philanthropy to being a type-A problem solver whose approach is frequently, "Ready, shoot, aim." So for the 12 years he provided 24/7 in-home care for wife Diane until her passing from Alzheimer's disease in September 2012, his frustration mounted over his inability to solve the disease that robbed her of her independence.

A member of the Keep Memory Alive board of directors since 2005, Mr. Snyder focused his legal and financial acumen on securing funding to construct what is now Cleveland Clinic Lou Ruvo Center for Brain Health in Las Vegas.

"It was miraculous for a startup organization like ours. All the stars were in alignment. If we hadn't concluded the financing when

we did, in another 60 days we wouldn't have had it," he says. "In fall 2006, the market fell apart."

Mr. Snyder credits the growth of Keep Memory Alive to its driving force, Chairman and Founder Larry Ruvo: "Larry is very persuasive and has universal influence. I believe he can get the ear of anyone he sets his mind to."

As for Larry Ruvo's success in securing a world-renowned medical partner, Mr. Snyder declares, "With Cleveland Clinic, we're forging top-of-mind awareness far beyond the borders of Las Vegas."

While Mr. Snyder is frustrated that Alzheimer's disease remains an enigma for even the brightest minds in medicine, he is delighted by the dignity with which Charles Bernick, MD, nurse Josie Gattbonton, and their colleagues treated his wife.

"Of course I want a cure for individuals and families who've been through Alzheimer's, but also for the country," he says. "The economics of the disease are appalling. If we don't do something, it's going to bankrupt the United States."



*Jerry Snyder and Sir Michael Caine at Keep Memory Alive's Power of Love gala*

# Harry Winston Launches Hope Collection Charm to Benefit Keep Memory Alive

Following the successful launch of its limited edition Harry Winston Hope Collection™ Bracelet, Harry Winston, Inc. is continuing its relationship with Keep Memory Alive through the introduction of a new charm.

With a brilliant Winston diamond poised at its center, the Harry Winston Hope Collection Charm™ is delicately handcrafted out of white gold and mother-of-pearl and can be worn as either a pendant or as part of a charm bracelet. Retailing for \$2,000, Harry Winston, Inc. will donate 20 percent of the retail sales price from each charm sold in its Las Vegas salon to Keep Memory Alive.

As part of the Harry Winston Brilliant Futures Charitable Program, the Harry Winston Hope Collection Charm™ will benefit seven leading non-profit organizations across the United States, chosen for their philanthropic leadership and support of local communities where Winston salons are based.

**For more information on the Harry Winston Hope Collection™, please contact the Las Vegas salon directly at 702.262.0001.**



*Brandis and Jon Deitelbaum*



## Cheers to the Environment and Keep Memory Alive

What if you could do something good for the environment and help one of your favorite nonprofits at the same time? It might sound like the classic “Do well by doing good” idea, but Brandis and Jon Deitelbaum of Toast Spirits in Henderson, Nevada have put their own unique stamp on the concept.

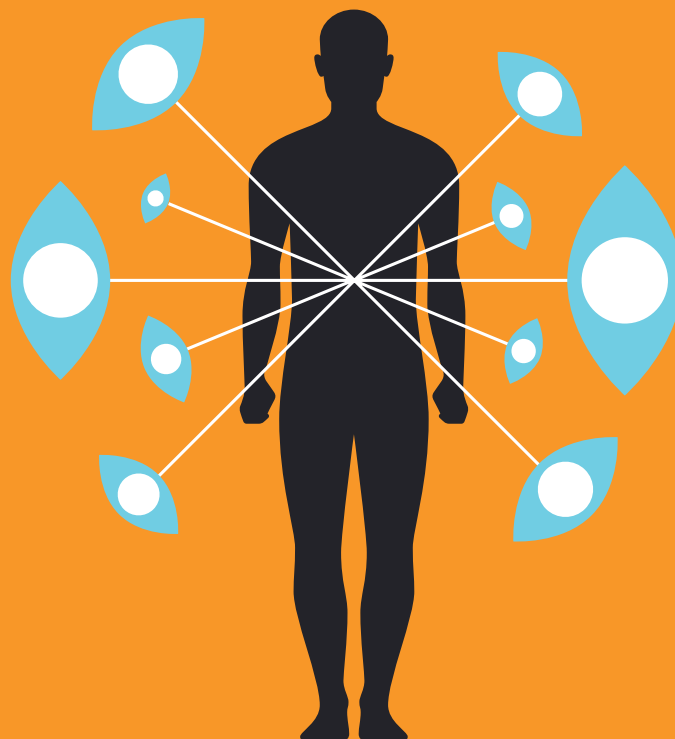
In founding Beau Joie champagne, the couple created a unique presentation in which each glass bottle is encased in a “suit of armor” handmade of 100 percent copper. The purpose of the copper is both aesthetic and functional, with the metal casing keeping the champagne cold without need for an ice bucket. The Beau Joie brand is about form and function and helping to reduce energy and reuse resources.

Toast Spirits representatives collect and recycle used bottles from clients, taking the copper to recycling centers across the country. With reclaimed copper yielding close to \$3 per pound, Toast Spirits decided to donate the proceeds from recycling to Keep Memory Alive.

“It’s a simple process,” says Mr. Deitelbaum. “We started the recycling program just two years ago and have already contributed over \$100,000 to Keep Memory Alive.”

Now that’s a whole new spin on reduce, reuse, and recycle.

**For information on where to find Beau Joie champagne, please visit [beaujoiechampagne.com](http://beaujoiechampagne.com).**



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Every life deserves world class care.

\*U.S. News and World Report 2013-14



**Scott Slavis, MD**



**Laurie Larsen, MD**



*Mike Borman, Angela Peyton, Chef Emeril Lagasse, Larry and Camille Ruvo, Brandis and Jon Deitelbaum, Marilyn LaFox, Brice Jones, Tricia and Howard Starr*

## Fun and Fundraising on the Shores of Lake Tahoe

Camille and Larry Ruvo, along with the McGill family, resurrected the Glenbrook rodeo at Shakespeare Ranch in 2000, long after it had been discontinued in 1965. This year's Glenbrook rodeo, with more than 450 guests and record fundraising, wrangled the title of Keep Memory Alive's most successful rodeo ever.



*Kenny Babyface Edmonds*

In addition to the traditional bull riding and barrel racing, a special highlight of the July 2013 rodeo was the release of the World Birds of Prey falcons, which performed a thrilling flyover to kick off the first afternoon. We thank Lee Halavais, and CEO Corrado De Gasperis and John Winfield of Comstock Mining for donating this exciting entertainment.

The excitement built as Trish Lynn and the All American Cowgirl Chicks®, an equestrian drill team based in Texas, performed trick riding and stunts. We were proud to present this team, which has been featured five times at the Tournament of Roses Parade. Following a barbeque under the stars, a special performance from country rock band Left of Centre capped off Friday evening.

On Saturday, the extravagant Western-style weekend of fun and fundraising continued as sponsors and special guests were hosted by Lori and Michael Milken. Lunch was served on the waterfront, and guests



*Emeril Lagasse, Camille Ruvo, Ray Romano and Larry Ruvo*



*above: World Birds of Prey falcon circles the rodeo grounds and Michael Milken, Wayne Prim and Michael Dermody*

enjoyed water sports and lectures by Mr. Milken and Cleveland Clinic Lou Ruvo Center for Brain Health's leadership team.

That evening, longtime Keep Memory Alive supporter Chef Emeril Lagasse once again graciously donated his time, talent, and raw food ingredients, flying his team from Las Vegas and New Orleans to join him in the kitchen at Shakespeare Ranch. They served up the best of his signature cuisine to guests dining outside on a crystal clear Lake Tahoe night.

Keep Memory Alive Chairman and Founder and the weekend's host, Larry

Ruvo, served as auctioneer, with two winning bidders each securing an Audemars Piguet watch autographed by Quincy Jones as well as a lunch with the entertainment legend.

The most hotly contested item was the George Rodrigue limited-edition God Bless America, in which his iconic blue dog is depicted pale and horror-stricken following the tragedy of 9/11. The evening concluded when ten-time Grammy winner Kenny "Babyface" Edmonds brought the barn down with his dynamic R&B tunes, inspiring many couples to take to the dance floor.

**Many thanks to our event sponsors:**

- Ellen and Frank Arcella
- Barrick Gold
- Bombardier Aerospace
- Viktoria and B. Keith Byer
- The Carano Family
- Cleveland Clinic
- Sandra and John Cook
- Tammy and Michael Dermody
- Eldorado Hotel & Casino
- Ferrari-Carano Vineyards & Winery
- The Griffith Family
- Sandy and Steve Hardie
- Susan and Jim Hart
- The Hulburd Family
- Hutt Aviation
- Ann and Charlie Johnson
- Roberta and Spencer Kaitz
- Kathy and Patrick McClain
- Mercator Asset
- Lori and Michael Milken
- North Tahoe Marina
- Anne and Tom Rackerby
- R & R Partners
- R & R Partners Foundation
- The Ruvo Family
- Beau Joie Champagne & Toast Spirits
- Ginger and Jim Walsh
- Karen and Rick Wolford



*left: Bob and Eleanore Preger, Cindy Carano and Lauren Wrentmore  
right: Artist Jeff Mitchum and Emeril Lagasse*





top left: All American Cowgirl Chicks

bottom left: Artist George Rodrigue auctions off one of his paintings

top right: Wade, Matt and Rachel Arcella

bottom right: Nicole, Kenny and Peyton Edmonds



Would you like to join Keep Memory Alive for more fun and fundraising? You can register online at [keepmemoryalive.org](http://keepmemoryalive.org) for events throughout the year. For additional information on supporting the Lou Ruvo Center for Brain Health, please contact us anytime at 702.331.7045 or [events@keepmemoryalive.org](mailto:events@keepmemoryalive.org).

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# awe-inspiring,

## by frank gehry.

The Keep Memory Alive Event Center in beautiful Symphony Park is the cornerstone of a reimagined downtown Las Vegas, where neon and cliché give way to a ribbon of steel and glass that comes to life under the desert sky. This one-of-a-kind Frank Gehry-designed space can be tailored to your individual event: corporate or personal, meetings or celebrations. These are the times to remember.

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**KEEP MEMORY ALIVE  
EVENT CENTER**

## Friend-Raising and Fundraising: Hosted Events Benefit Keep Memory Alive

In its 18-year history, Keep Memory Alive has raised more than \$125 million. But we haven't done it alone: An army of individuals and organizations has approached us with ideas for creating and hosting events to benefit Keep Memory Alive and Cleveland Clinic Lou Ruvo Center for Brain Health. These events have spanned dinners, golf outings, dunk tanks, networking mixers, and happy hours, as well as donations organized in lieu of gifts to commemorate important personal events, such as birthdays.

Typically, these enthusiastic and generous event organizers have been personally affected by brain disease and are driven in large part by emotion. Of course, it's also an opportunity to showcase their talents or their companies' wares, and they invite constituents important to their businesses.

For Keep Memory Alive, this wider attendance base helps us build awareness among people who might otherwise never have heard of us. Community partners who have hosted events become our ambassadors.

"The care and research being conducted at the Lou Ruvo Center for Brain Health is so important. I couldn't think of a better way to lend support than by having donations directed to this cause," says Lynn Weidner, who orchestrated donations to Keep Memory Alive in lieu of gifts for a milestone birthday.

**We invite you to tour Cleveland Clinic Lou Ruvo Center for Brain Health and become an ambassador for our work.**

**If you would like to host an event to benefit Keep Memory Alive, we would like to hear from you at 702.263.9797 or [events@keepmemoryalive.org](mailto:events@keepmemoryalive.org). If you are interested in attending an event, please view the "upcoming events" section of [keepmemoryalive.org](http://keepmemoryalive.org).**

### Sip & Savor

Spago at The Forum Shops at Caesars hosted Sip & Savor on May 29, with proceeds benefiting Keep Memory Alive.

"We were looking for a way to celebrate the 20th anniversary of Spago, while recognizing the talent at all of our restaurants in Las Vegas," says David Robins, Managing Partner, Wolfgang Puck Fine Dining Group. "We wanted to create something fun for our guests, while also giving back to our community."

The mix-and-mingle, dine-around-style event was a great success, with more than 400 guests attending. "We're looking forward to hosting it again and making Sip & Savor an annual event," says Stephanie Davis, Director of Brand Communications, Wolfgang Puck Fine Dining Group.

So are we at Keep Memory Alive.

*Chef Wolfgang Puck hosted Sip and Savor*



### Vegas Dozen

Saks Fifth Avenue selected Keep Memory Alive as the beneficiary of its 10th annual Vegas Dozen, a networking mixer that celebrates 12 Las Vegas men. Individuals attend largely to support specific honorees, and may not necessarily know Keep Memory Alive. We're able to explain what we do and thank those who have helped.



*top left: Kimberly Trueba (R), Jan Jones and guest*

*bottom left: KMA Board Member Michael Severino, and Norm Clarke (R)*

*top right: Elaine Wynn and KMA Board Member Lovee Arum (R)*

*bottom left: Cleveland Clinic's Dylan Wint, MD, is escorted down the catwalk and inducted into the Vegas Dozen class of 2013*

“The event is a platform for Keep Memory Alive to acknowledge philanthropic Las Vegasans who have been most important not only to the success of our charity, but also to the many nonprofits in the community that have benefited from their generosity,” says Camille Ruvo, Vice Chairman, Keep Memory Alive Board of Directors.

Mari Landers, Vice President and General Manager of Saks Fifth Avenue, says, “This charitable venture gives Saks an incredible opportunity to support our community by raising funds and awareness for Keep Memory Alive, and to recognize 12 men who have contributed to the Las Vegas community.”

### **Let's Collaborate**

Events create environments for Cleveland Clinic Lou Ruvo Center for Brain Health's staff to meet and engage with people who might become ambassadors, donors, or patients.

Keep Memory Alive embraces the initiative displayed by third-party hosts and supports these events in ways that make sense for both the host and the beneficiary. In advance, we might spread the word to our constituents via e-mail blasts and social media; the day of the event, we might provide brochures, promotional items, or a speaker to thank attendees and say a few words about the research being conducted at the Lou Ruvo Center for Brain Health.

Large or small, third-party events create a wonderful boost for Keep Memory Alive. Each one is important to our friend-raising and fundraising mission.

“We're so grateful for the community's support and for everyone who believes in our mission and wants to be a part of it,” says Anna Robins, Senior Director of Special Events for Keep Memory Alive. “At some point in our lifetimes, everyone will be touched by Alzheimer's, Parkinson's, Huntington's, multiple sclerosis, or other insidious diseases treated at the Lou Ruvo Center for Brain Health. If we all work together now, maybe we can find a way to improve brain health and stop the devastation caused by these diseases.”

VISITOR PHOTO GALLERY



*Kate Zhong, MD, welcomes George Clooney*



*Michael Severino, Richard Gore, Duff Goldman, Kate Zhong, MD, and Jeff Cummings, MD, ScD*



*Sascha Moeri, CEO of Carl F Bucherer, Larry Ruvo and Jan Edocs, CEO of Milus*



*Football great Joe Montana launches Aviation Gin at the Keep Memory Alive Event Center*



*Elizabeth and Bernt Bodal, Chairman and CEO, American Seafoods Group*



*Bob and Diane Bigelow flanked by Larry Ruvo (L) and Jeff Cummings, MD, ScD*





Larry Davis (L) and Raymer Pry of Palm Mortuaries present a donation from their Tree of Memory community program to Keep Memory Alive COO Lisa Manning



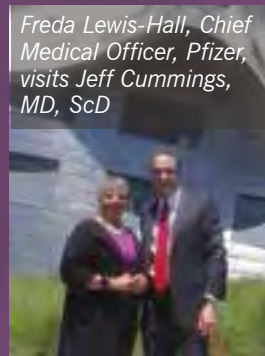
Joe Ungaro holds his son during a family visit to the Lou Ruvo Center for Brain Health



Susan Reisinger, MD, Brian Lawenda, MD, and Cynthia Barry of 21st Century Oncology



Gerald and Sheila Ryan, and Evelyn and Colman Ryan, MD



Freda Lewis-Hall, Chief Medical Officer, Pfizer, visits Jeff Cummings, MD, ScD



Kristin West (L) and Betty Kemper visit from Cleveland



Larry Ruvo (L) welcomes Cliff Atkinson, General Manager, Mandarin Oriental Las Vegas



*Sol and Rosie Lew unveil plaque honoring Mr Lew's mother, Esther*



*Jackie Conway (L), Steve Lawrence, the late Eydie Gorme, Larry Ruvo, Charlene Sharkey Conway, Tim Conway, Judy Tannen and Jeff Cummings, MD, ScD*



*Steve Lawrence and the late Eydie Gorme celebrate their support of Keep Memory Alive in one of her final public appearances*



*Lindsay and Paula Fox are recognized on Keep Memory Alive's Honor Wall*



*Sam Merritt (L) and Russell Gardner (R) of Southern Wine and Spirits encircle Chris Rom and Robin Ottaway of Brooklyn Brewing Company*



*Left to Right: Larry Ruvo hosts Ed Shirley, Robert Furniss-Roe and Derek Hopkins of Bacardi*

# Recognized for Excellence

In the first half of 2013, Cleveland Clinic Lou Ruvo Center for Brain Health's employees were recognized by their community, peers, and professional associations for clinical excellence and leadership in their fields.

**We celebrate their accomplishments.**

## Top Doctors

(*Las Vegas Life* magazine, spring 2013):

**Charles Bernick, MD,**

Associate Medical Director

**Jeffrey L. Cummings, MD, ScD,** Director

**Ryan R. Walsh, MD, PhD,** Director, Parkinson's Disease and Movement Disorders Program; Director, Huntington's Disease Program

**Timothy West, MD,** Director, Mellen Program for MS at the Lou Ruvo Center for Brain Health

**Dylan Wint, MD,** Director, Fellowship in Behavioral Neurology and Neuropsychiatry; Director, Education in Neurodegeneration

## Distinguished Leadership Award

(Huntington's Disease Society of America's Las Vegas Affiliate, May 2013):

**Ryan R. Walsh, MD, PhD**

## Healthcare Headliners, Community

**Outreach category** (*Vegas/INC*, April 2013)

**Susan Hirsch, MSW, LSW,**  
Director, Social Services

## Vegas Dozen

(Saks Fifth Avenue, April 2013):

**Dylan Wint, MD**



Cleveland Clinic Lou Ruvo Center for Brain Health colleagues join Education Coordinator Susan Farris, who accepts a Health Advocate Award on behalf of Dylan Wint, MD, and Jeffrey Cummings, MD, ScD, as he accepts his Lifetime Achievement award

## 40 Under 40

(*Vegas/INC*, March 2013):

**Anna Robins,**

Senior Director of Special Events

**Ryan R. Walsh, MD, PhD**

## Best Doctors

(*Seven* magazine, February 2013):

**Charles Bernick, MD,**

Associate Medical Director

## Health Advocate Award

(Community Partners for Better Health, February 2013):

*Lifetime Achievement category*

**Jeffrey L. Cummings, MD, ScD**

*Educator category*

**Dylan Wint, MD**

**Emerging Leaders Forum** (American Academy of Neurology, Class of 2013):

**Ryan R. Walsh, MD, PhD**



Susan Hirsch, Jeffrey Cummings, MD, ScD, and Anna Robins celebrate their recognition in the community

# KEEP MEMORY ALIVE

Supporting the Mission of the Cleveland Clinic Lou Ruvo Center for Brain Health



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Lisa Manning  
Executive Director

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Please visit [keepmemoryalive.org](http://keepmemoryalive.org) to learn how you can invest in memories and support the work of Cleveland Clinic Lou Ruvo Center for Brain Health