

# New Thinking

About  
Thinking

A Publication by the Cleveland Clinic Lou Ruvo Center for Brain Health

Grand Opening | Depression in Neurodegeneration | Until There's A Cure



# Message From the Director

Jeffrey L Cummings, MD

Director, Cleveland Clinic Lou Ruvo Center for Brain Health



I am delighted to be the Director of the Cleveland Clinic Lou Ruvo Center for Brain Health. My goal is to advance new treatments for Alzheimer's disease (AD) and to continue the center's work on Parkinson's disease, Huntington's disease and ALS. The credibility and resources of the Cleveland Clinic; the committed philanthropic support

of Larry Ruvo, Keep Memory Alive and the Las Vegas community; and an experienced team of people working on neurocognitive disorders combine to make this the most exciting leadership position in contemporary translational research and care for neurocognitive disorders. The excitement of our mission is reflected in the groundbreaking architecture of our building, designed by Frank Gehry.

We intend to build on Cleveland Clinic's philosophy of "patients first" to develop new treatments for this generation of patients with neurocognitive disorders and the next. The only way to test new treatments is through clinical trials. The large patient flow and Cleveland Clinic's tradition of clinical excellence lend themselves to providing robust participation in clinical trials for emerging AD drugs. We plan to embed clinical trials in patient care, so that each patient understands clinical trials are a critical means of developing new treatments for themselves and for generations to follow. In this way, patients will be empowered to be part of the battle to advance new treatments for AD and related conditions.

We are fortunate to have an experienced clinical trials team led by Dr. Charles Bernick, which will become more active as potential treatments emerge. An expanded team will be recruited and implemented at the main Cleveland Clinic campus and, eventually, at Cleveland Clinic Florida. Each of these sites will provide expertise, patient populations and resources. The Cleveland site has a terrific platform for biomarker-based proof-of-concept studies that assist in deciding if an agent is

sufficiently promising to advance into larger, more definitive trials. Structural (magnetic resonance imaging), functional (glucose positron emission tomography), molecular (amyloid imaging) and biochemical (cerebrospinal fluid protein levels) measures are available to assess the impact of new treatments on the fundamental biological aspects of neurocognitive disorders.

Rapidly evolving understanding of the molecular underpinnings of neurodegenerative diseases provides specific targets for pharmacologic interventions to reduce the production of toxic proteins, increase their removal or protect nerve cells against protein-related injury. These exciting advances have led to a plethora of new drugs. More than 80 new treatments for AD are currently being tested in clinical trials, and many more are being tested in animal models of AD. The slowest step in the development of new treatments is recruitment of patients into clinical trials to determine whether a drug provides benefit and has acceptable side effects in humans. We plan to address this challenge in the Lou Ruvo Center for Brain Health.

Kate Zhong, MD, and I are joining the Center for Brain Health simultaneously. I will provide strategic leadership, and she will provide research development capacity for the organization. My background as a professor and AD center director at UCLA and her experience as a geriatric psychiatrist and clinical trialist with AstraZeneca pharmaceuticals combine to create a team uniquely suited to advance new treatment development in a large and complex organization such as Cleveland Clinic. We are also life partners. Our decision to accept these positions was facilitated by Larry Ruvo, Toby Cosgrove, Mike Modic, Rick Rudick and Karim Botros, among others. We are joining a distinguished team of neuroscientists and look forward with keen anticipation to using all the resources and collaboration available to us to advance new treatments for the neurodegenerative disorders that, tragically, afflict so many.

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## Grand Opening

Larry Ruvo

Chairman, Keep Memory Alive

As I sit back with a smile on my face and reflect on what has transpired since that first fundraising dinner on Sept. 19, 1996, I want to thank you for believing in me and for believing in my dream. I know full well that none of this would have been possible without the ongoing support from so many friends from around the world.

The opening of the Cleveland Clinic Lou Ruvo Center for Brain Health already has had a positive impact on the course of medical history with respect to amyotrophic lateral sclerosis (ALS), Alzheimer's, Huntington's, Parkinson's and other devastating brain disorders. What better place could there be to house such a one-of-a-kind-team and a truly unique research and treatment center than a one-of-a-kind Frank Gehry-designed facility?

The entire Ruvo family, the Keep Memory Alive board members and the dedicated employees of the Lou Ruvo Center for Brain Health send you their tremendous appreciation and sincerest gratitude for a very grand opening. With your help, what happens in Vegas will benefit the rest of the world.

Thank you.

1,000 biodegradable balloons stuffed with handwritten memories by those whose lives have already been touched by the center were released during the May 21 grand opening event



## Features

**O**n May 21 and 22, 2010, Cleveland Clinic Lou Ruvo Center for Brain Health celebrated the completion and grand opening of its Keep Memory Alive Event Center designed by world-renowned architect Frank Gehry.

On the morning of Friday, May 21, patients, doctors, volunteers, politicians and media gathered as Keep Memory Alive Chairman Larry Ruvo, Cleveland Clinic CEO Toby Cosgrove, MD, and caregiver Pat Strong proclaimed the impact the center has on Las Vegas and patient care. Adding to the excitement, Las Vegas Mayor Oscar Goodman declared May 21 Brain Health Day in the city of Las Vegas. After the moving speeches were given, 1,000 biodegradable balloons stuffed with handwritten memories by those whose lives have already been touched by the center were released to honor the achievement of Larry Ruvo's dream that was 14 years in the making. On Friday evening, the center hosted the local medical community at Cleveland Clinic's first continuing medical education event in its Nevada facility. On Saturday evening, the festivities continued with a VIP donor event in the new Event Center, recognizing those who have deeply supported Keep Memory Alive over the years. Food stations with wine pairings were arranged around the facility, thanks to long-time KMA restaurateurs and supporters such as Todd English, Emeril Lagasse and Wolfgang Puck, who once again donated their culinary art. The décor complemented the celebratory mood with bright colors and unique floral arrangements, while background entertainment was provided by MASS ensemble. The guests of honor included Mr. Ruvo, Dr. Cosgrove and Frank Gehry.

The Keep Memory Alive Event Center is a full-service event space designed for creating memories. It is available for use by the public, complete with state-of-the-art audio/visual technology, extraordinary up-lighting and catering services. Proceeds from the event space are directed toward Keep Memory Alive's mission of preserving memories.

1992



Larry Ruvo begins his search for neurocognitive care for his father, Lou. Realizes there are no viable medical options in his home state of Nevada

02.17.1994



Lou Ruvo passes away from Alzheimer's disease

1996



Larry Ruvo hosts a memorial dinner in his father's honor at Wolfgang Puck's Spago. Friends contribute unsolicited funds, which serve as the seed money for the founding of Keep Memory Alive. The dinner is the first annual celebration of Lou Ruvo's life, ultimately becoming the Power of Love gala

02.09.2007



Keep Memory Alive breaks ground on its Frank Gehry-designed headquarters and medical clinic

12.03.2007



Keep Memory Alive hosts the first annual Leon Thal Symposium, convening the world's foremost authorities in Alzheimer's research

# Features



*Mayor Oscar Goodman, Caregiver Pat Strong, Dr. Toby Cosgrove and Larry Ruvo*

*Camille and Larry Ruvo, Anita and Dr. Toby Cosgrove, Mayor Goodman, Lauren Ruvo*

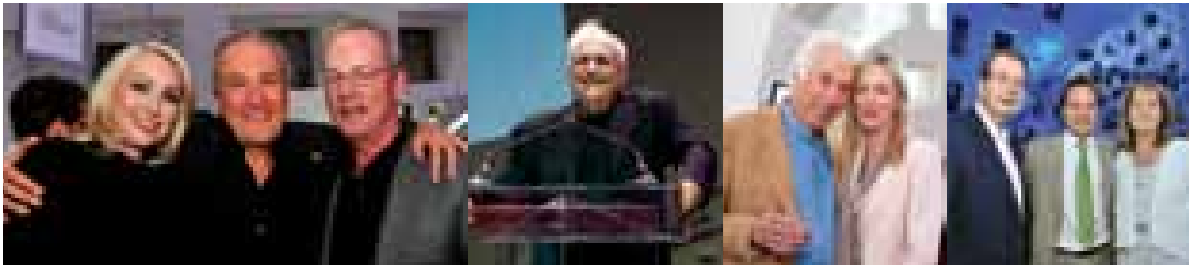
*J.Kell and Nancy Houssells*



*The Arum-Hazan Family*

*Dr. Toby Cosgrove presents The Ruvos with a commemorative Gehry piece by Tiffany*

*(L) Jewel Brooks and Laura Hoenemeyer*



*Audra Hendley, Larry Ruvo, and Bobby Baldwin*

*Frank Gehry shares his delight over his creation*

*Chuck and Stacey Mathewson*

*Bruce Layne, Dan Tutlan, and Sherry Layne*

02.17.2009



Keep Memory Alive announces the selection of Cleveland Clinic as its medical partner to operate the Lou Ruvo Center for Brain Health

07.13.2009



Cleveland Clinic Lou Ruvo Center for Brain Health treats its first patients. Anticipates 12,000 patient visits per year when fully staffed

7.22.2009



Keep Memory Alive hosts second annual Clinical Trials on Alzheimer's Disease to pursue therapy development for Alzheimer's

10.30.2009



The Alzheimer's Breakthrough Act of 2009 is presented to the 111th Congress

05.21.2010



Keep Memory Alive opens its Event Center dedicated to creating memories for individuals who host and attend activities in the space, from which revenue will benefit the organization's commitment to eradicating memory disorders

## Doubling Up on Brain Health



*Dr. Jeffrey Cummings and Dr. Kate Zhong*

**T**he Cleveland Clinic Lou Ruvo Center for Brain Health is doubling its efforts to bring world-class medical care to Las Vegas by recruiting two internationally prominent doctors to its campus. Drs. Jeffrey L. Cummings and Kate Zhong are experts in neurology and geriatric psychiatry, respectively. They will be leading the clinical and research efforts of the Lou Ruvo Center for Brain Health.

This dynamic medical duo has a proven track record in both their professional and personal collaborations. They have published scientific articles together, jointly served on professional boards, participated in medical conferences and they are married.

Dr. Cummings is the Director of the Lou Ruvo Center for Brain Health, and is responsible for developing the center's research capabilities and clinical programs, including initiating drug development activities for neurodegenerative disorders. He is a neurologist specializing in identifying and treating neuropsychiatric and neurocognitive disorders, particularly Alzheimer's disease and other dementias. He received his medical degree from the University of Washington School of Medicine. He completed an internship at Hartford Hospital in Hartford, CT, followed by a residency in neurology and a fellowship in behavioral neurology at the Boston University School of Medicine. He completed another fellowship in neuropathology and neuropsychiatry at the National Hospital for Neurological Diseases in London. He was then recruited to University of California Los Angeles, where he became one of the world's best-known Alzheimer's researchers.

Dr. Zhong is the Senior Director of Clinical Research and Development for the Lou Ruvo Center for Brain Health.

She brings more than 15 years of diversified clinical and pharmaceutical research experience to the center. She received her medical degree from West China University of Medical Sciences in Sichuan, China, and completed her master's degree in pharmacology and her residency in psychiatry at University of Toronto in Canada. As the attending geriatric psychiatrist at Riverview and Royal Columbian hospitals in Vancouver, Dr. Zhong gained extensive experience caring for patients with neurocognitive disorders. While working as the medical director



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for a leading pharmaceutical company, she led multiple global clinical trials in central nervous system therapeutic areas, including Alzheimer's disease.

The doctors' compatible philosophies, education and experience have set them off on a mission to explore mankind's most complex and enigmatic organ – the human brain. Encapsulated behind the skull and three layers of tissue that serve as a barrier, the elusive brain controls everything about us – who we are and how we live, act and think. While it is good that the brain is so carefully protected, its restrictive access poses a challenge to researchers and makes neurodegenerative diseases like Alzheimer's a challenge to study.

For researchers like Drs. Cummings and Zhong, that is what drew them to this scientific specialty. "My mind is always generating ideas," Dr. Cummings said. "I love the process of solving problems, organizing, resolving, trying on solutions. I love solving problems for others and helping them with their lives. Using science to get to better treatments for people and helping them have better lives is unimaginably satisfying."

Most recently, Dr. Zhong served as Chief Executive Officer, Global Health Alliance in Sherman Oaks, CA, while Dr. Cummings was the Augustus S. Rose Professor of Neurology, Professor of Psychiatry and Behavioral Sciences, Director of the Mary S. Easton Center for Alzheimer's Disease Research at UCLA and Director of the Deane F. Johnson Center for Neurotherapeutics in Los Angeles.

The move is great news for Lou Ruvo Center for Brain Health patients suffering from neurocognitive diseases as they will now be first in line to participate in groundbreaking research. Both Drs. Cummings and Zhong are confident that clinical trials are the key to long-term advancements in brain health, potentially saving future generations from the scourge of dementia and other neurodegenerative brain diseases.

"We are really excited about involving the people of Las Vegas and Nevada in clinical trials for new treatments for neurological disease. Nevadans can think out-of-the-box – if they can create a city in the desert, they can certainly cure Alzheimer's disease.

We'll show them how," said Dr. Cummings.

While Dr. Cummings' educational and professional credits are exceptional, perhaps his most telling impact can be summed up in a recent speech given by one of his patients named Bob:

*This disease is a thief who steals your self esteem. Dr. Cummings helps recover it and return it to me.*

*He told me at our last appointment that he liked the way I described our relationship as, "This disease is a journey and Dr. Cummings is my guide." These are words I fully embrace, but no longer remember saying.*

*But I want to share something I do vividly remember. It was an experience I had when I was 12 years old on a moonlit hike to our Boy Scout campground. I was the youngest and smallest in our troop and the backpack became unbearably heavy. I was exhausted and knew I couldn't make it.*

*Magically, my backpack got lighter. I turned around and saw my brother had wordlessly lifted some of the weight off me with his hand under my backpack as we continued hiking.*

*That's what you do for me, Dr. Cummings. You quietly lift this burden so I can keep going. And, in so doing, you have become my brother.*

# Depression in Neurodegeneration

By Dylan Wint, MD



*Dr. Dylan Wint*

## **What is depression?**

Depression (or major depressive disorder) is a syndrome – a group of related symptoms – that results from a change in the brain’s function. We are not sure what causes depression. It is sometimes related to life circumstances, for example grief or stress. It also is associated with a number of physical conditions, including diabetes, heart disease and nutritional deficiencies. Depression is particularly common in diseases that affect the brain, such as stroke, Parkinson’s disease and Alzheimer’s disease. In people with brain diseases, biological changes in the structure, function and chemistry of the brain probably increase the risk of depression. But depression can strike people without any known risk factors – 10 to 20 percent of people will suffer a depressive episode at some point in their lives.

## **What does depression look like?**

People with depression have a persistently sad mood or decreased enjoyment of life that lasts for at least two weeks. Because of abnormalities in the brain’s function, other symptoms can occur. These include altered sleep patterns, fatigue or poor energy, decreased interest in pleasurable activities, feeling heavy or slowed down, and fluctuations in appetite. Some depressed people feel changes in the way they think, such as impaired concentration, slow decision-making, excessive thoughts of guilt or worthlessness and thoughts about death.

Depression often looks somewhat different in people with neurodegenerative disorders because of their problems with memory, awareness and communication. They might not complain about being sad, but their facial expressions and the things they say betray a negative or hopeless attitude. Irritability and social withdrawal can take the place of sadness. Patients often “put on a good face” during office visits, leaving healthcare providers to rely on caregivers to report changes in mood and behavior.

Depression in caregivers also frequently goes undetected and untreated. Caregivers try to maintain a positive attitude even when things are not going well. They can become so busy with caregiving that they miss signs of their own illness. Sometimes caregivers worry about being weak, complaining or putting blame on their loved one, so they don’t speak up about being depressed. Some symptoms of depression are mistaken for “part of

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the job” of caregiving, since every caregiver has experienced fatigue, poor sleep or feelings of unworthiness. However, when such feelings and thoughts are pervasive, persistent and interfere with one’s ability to get through the day, depression might be the cause.

### What’s the big deal?

Obviously, being depressed is a miserable way to feel. But depression has many other serious complications.

Direct consequences of depression include malnutrition, poor performance, reduced productivity and even death from suicide or poor self-care. Scientists are studying whether depression can actually make the course of neurodegenerative diseases worse. For example, some studies have suggested that having depression increases the risk of getting dementia, and that depression makes dementia progress more rapidly. Depression increases the suffering caused by other illnesses, including heart disease, stroke, pain syndromes and diabetes. Depression can deeply affect relationships with spouses, children and friends.

### What can we do about it?

Episodes of depression are common, especially in neurodegenerative disease, and they can be hard to detect. But depression does not have to be permanent – most people respond to approved treatments for depression. Antidepressant medication is the most common treatment. These medicines are widely available and are safe and effective when used appropriately. Although they are a good choice for many people, medications are by no means the only option. Non-medical methods of improving mood include habitual exercise, proper sleep habits, stress reduction techniques and regular participation in leisure activities. Studies have demonstrated that cases of mild and moderate depression respond as well to talk therapy as they do to medication.

### About the Author:

*Dylan Wint, MD is board certified both in psychiatry and neurology, and has focused his career on understanding and treating neural-based behavioral disorders. He participates in clinical and research programs in this area at the Lou Ruvo Center for Brain Health, and will lead the center’s professional education programs.*

*Dr. Wint received his medical degree at the University of Miami School and completed his training at the University of Florida and the National Institutes of Health. He holds a Bachelor of Science from Stanford University. Dr. Wint most recently served as Assistant Professor and Director, Program in Neurologic Psychiatry at Emory University Medical School.*

## Resources available at the Cleveland Clinic Lou Ruvo Center for Brain Health:

- For an appointment, call 702.483.6000.
- For available social services, see “Ongoing Supportive Services for Caregivers” on page 36.



*Dr. Charles Bernick discusses a brain image*

## Until There's a Cure

By Charles Bernick, MD

**T**here currently is no cure for Alzheimer's disease (AD). This fact has often led to therapeutic nihilism on the part of both the medical profession and the general public. Like many common chronic disorders such as diabetes, heart disease or arthritis that are incurable but can be effectively managed, AD is a treatable condition in which a coordinated effort can make a significant difference.

Effective treatment for any disease begins with accurate diagnosis. While the hallmark symptoms of AD are impairment of short-term memory and higher levels of information processing such as judgment, reasoning and planning, other conditions also can cause such problems. Therefore, the initial step is a thorough investigation by an experienced physician including laboratory testing and brain imaging to exclude these other causes. Though there is no single diagnostic test for AD, commonly used clinical criteria have an accuracy of 80 to 90 percent. Moreover, there is a national initiative, of which the Cleveland Clinic Lou Ruvo Center for Brain Health is a part, to identify a test that can be used to diagnose AD conclusively. While the diagnosis of AD in most cases is relatively

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straightforward, it is important to recognize that coexisting medical conditions can contribute to cognitive and functional impairment. For example, among individuals with pathologically verified AD, those who had evidence of concurrent strokes had a more severe decline. Moreover, it has been shown in several epidemiological studies that individuals with cardiovascular disease are at a higher risk of developing AD. Presumably, better treatment of these vascular disorders would at least retard the progression of AD.

Management strategies for AD that are most likely to be successful are those that integrate both medications and lifestyle interventions. The drugs that are most commonly used attempt to replace or normalize neurochemicals that are known to be deficient in AD. One group of agents is called cholinesterase inhibitors and include donepezil (Aricept), rivastigmine (Exelon) and galantamine (Razadyne). Studies have repeatedly shown these drugs to not only provide a modest improvement in cognitive abilities such as memory and attention, but also to slow down functional decline, control behavioral problems, delay residential care placement and reduce caregiver burden. Mementine (Namenda) represents another class of medications that target the neurotransmitter glutamate. Mementine has shown benefit in patients with moderate to severe AD and can be used in conjunction with a cholinesterase inhibitor.

It is unclear how early medications should be started. Certainly, there is evidence that once the diagnosis of AD is made, treatment should begin. However, researchers at the Lou Ruvo Center for Brain Health are beginning a study to evaluate the effectiveness of the cholinesterase inhibitor rivastigmine in patients with mild cognitive impairment (MCI), the transitional phase between normal cognition and dementia. It is known that most (though not all) individuals with MCI progress to AD. By using a sophisticated imaging technique called functional MRI, investigators at the Lou Ruvo Center for Brain Health are evaluating whether rivastigmine can produce improved brain function at this very early stage.

In addition to pharmacological therapies, there has been increasing interest in the effect of lifestyle interventions in the treatment of AD. There is convincing evidence from animal studies that physical exercise promotes brain health through multiple mechanisms, including the production of nerve growth factors that nourish brain cells and stimulate brain stem cells. Human trials have confirmed the beneficial effect of exercise among individuals with memory complaints. Larger trials are under way to determine the right “dose” of exercise needed to obtain maximal effect.

Other lifestyle factors that may play a role in brain health include participating in cognitively stimulating activities, remaining socially engaged and following a diet that is rich in antioxidants such as green leafy vegetables, berries and dried fruit.

It is the sum of multiple modalities that adds up to provide the best hope of managing AD. On the research front, there is an ongoing aggressive search for agents that will slow down or prevent the progression of AD. One major focus for the Lou Ruvo Center for Brain Health is to accelerate discovery and testing of new medications and treatments for not only AD, but also Parkinson’s disease, Huntington’s disease and other associated disorders.

To learn more about the research trials in progress at the Lou Ruvo Center for Brain Health, please call 702.483.6026.



Research Coordinator Kathy Nagle coaches Pete Becker through his ride in *Therapeutic Effects of Exercise on Parkinson's Disease*, a study sponsored by The Dorothy J. Keyser Foundation and The Layne Library for Parkinson's

## Forced Exercise Holds Promise as a Novel Intervention for Parkinson's and Other Neurodegenerative Diseases

By Jay L. Alberts, PhD

**A**lthough studies in animal models of Parkinson's disease (PD) have shown that exercise improves motor function and has neuroprotective benefits, results of clinical research investigating the effects of exercise in human PD patients have been less promising. Specific exercise regimens have been associated with a few specific improvements, such as increased strength from weightlifting or increased walking speed after treadmill training. However, exercise protocols have failed to produce any global motor improvements as measured with accepted clinical tools such as the Unified Parkinson's Disease Rating Scale (UPDRS), or improvements in parts of the body that were not being exercised.



*Dr. Alberts presents findings from his forced exercise study at the Continuing Medical Education session during the Lou Ruvo Center for Brain Health's grand opening*

Personal coincidental observations made on two separate occasions of remarkable symptomatic improvements in PD patients sharing a tandem bicycle with me, a trained cyclist, motivated me to explore the discrepancy between the promising results of the animal research and the marginally effective results of human studies. This has led to a clinical study program that we hope will establish exercise as a novel intervention for improving motor function and altering brain function in patients with PD. If successful, the research will be exciting, not only because an exercise-based treatment approach will enable patients to take an active role in their disease management, but also because a treatment that affects brain function might positively alter (that is, slow down) the natural course of PD and, possibly, other neurological diseases.

#### [Exercise Intensity and Motor Function Improvement](#)

The research conducted in rodent models of PD involved a “forced exercise” regimens that placed the animals on a treadmill and set the pace faster than their natural walking speed. In contrast, the exercise intensity for human participants in clinical studies has been under their individual control. I

postulated that the tandem bicycle riding might have been a form of forced exercise that could be responsible for the patient-noted improvements in motor function. Animal research showing a direct correlation between increasing rate of exercise and improvement in global motor function was consistent with the concept that differences in exercise rate might explain the discrepancy in outcomes between the animal and clinical research.

In 2007, we initiated a proof-of-concept study to investigate the hypothesis that PD patients might derive motor function benefits from physical exercise, if the exercise was conducted at a rate higher than they could normally achieve. The results were recently published in a leading rehabilitation journal.<sup>1</sup> The study randomized 10 PD patients to voluntary and forced exercise groups. Participants in the voluntary group rode a stationary single bicycle at the rate of their choice; those in the forced-exercise group rode a stationary tandem bicycle with a trained cyclist at a rate of 80 to 90 revolutions per minute.

Patients in both groups completed one-hour exercise sessions three days a week for eight weeks at similar aerobic intensities.



*Dr. Alberts (front) demonstrates the role the tandem bicycle played in developing the concept of forced exercise*

Patients were assessed at baseline, at the end of the exercise program and at four weeks following its completion. Assessment included a fitness evaluation of maximal oxygen uptake (VO<sub>2</sub>max), a motor function evaluation using clinical ratings (the UPDRS Part III motor score) and a biomechanical assessment of manual dexterity. Manual dexterity was included as a specific measure of motor function in the non-exercised upper extremities to explore the concept that forced exercise may produce global effects and result in positive changes in central motor control processes.

### [Imaging Shows Increased Brain Activation](#)

After eight weeks of exercise, patients in both groups achieved significant improvements in aerobic fitness. However, motor

function benefits were observed only in the forced-exercise group. After eight weeks of forced exercise, patients exhibited a statistically significant 35 percent improvement over baseline UPDRS III scores. Although their scores had worsened four weeks after exercise stopped, they still showed an improvement over baseline that approached statistical significance.

More strikingly, the forced exercise group showed a significant improvement in manual dexterity that was maintained at the four-week follow-up examination. Changes included improved coupling of grasping forces, interlimb coordination and rate of force production. No significant changes from baseline UPDRS III or manual dexterity scores were observed in the voluntary exercise group immediately after exercise ceased or at the four-week follow-up visit.

Encouraged by these results that indicated forced exercise may have a disease-modifying impact, we undertook a short-term followup study to examine changes in brain function using functional magnetic resonance imaging (fMRI). Conducted in collaboration with Micheal Phillips, MD, Department of Neurosciences, and Mark Lowe, PhD, Department of Diagnostic Radiology, the study had a crossover design in which the PD patients underwent imaging on three separate occasions: three to four hours after completing a forced exercise session, three to four hours after taking their anti-PD medication and when they were not exposed to exercise or medication. The order in which these imaging tests were conducted was randomized across subjects. When compared with the control visit, the fMRI scans showed that exercise and medication produced similar neural responses in terms of increasing activation levels in both the cortical and subcortical areas of the brain.

### [New Data Forthcoming](#)

We have expanded this research into a larger clinical trial being conducted at both the Cleveland Clinic Lou Ruvo Center for Brain Health in Las Vegas and at the Cleveland Clinic main campus. Our goal is to recruit 60 patients, who will be randomized to a no-exercise control group or to an eight-week program of voluntary or forced exercise, with followup at four and eight weeks. Endpoints include the same clinical and biomechanical measurements assessed in our pilot study, along with additional



## Spotlight on Brain Health | Parkinson's Disease

biomechanical measurements of lower-extremity function and postural stability. This trial also includes an imaging component that will provide the first data on possible long-term effects of forced or voluntary exercise on brain function. Patients in the forced-exercise group will use a motorized stationary single bicycle that is practical for adaptation to clinical and home use.

The mechanism(s) by which forced exercise produces the neural and motor changes we have observed are unknown. However, there is evidence that peripheral nerve stimulation increases excitability in the motor cortex. Animal research indicates that forced exercise is associated with increased brain levels of dopamine and/or neurotrophic factors (GDNF or BDNF). If forced exercise induces these neurochemical changes in humans, it may have exciting potential to slow disease progression and delay the need for medical therapy in patients diagnosed with PD. Looking ahead and considering that these neurotrophic factors have established importance in the acquisition of motor skills, the opportunity to positively alter their levels through forced exercise has us thinking about future research investigating this intervention in Alzheimer's disease, stroke rehabilitation and other neurodegenerative disorders.

### *About The Author*

*Jay L. Alberts, PhD, is a researcher in the Department of Biomedical Engineering at Cleveland Clinic Lerner Research Institute and a staff member in the Center for Neurological Restoration. His specialty interests include the effects of deep brain stimulation on motor function of Parkinson's disease patients and the effects of unilateral DBS on bilateral motor function.*

For more information on his research in Las Vegas, please contact Kathy Nagle at 702.483.6047; in Cleveland, contact Mandy Penko at 216.636.9717.

### *Reference*

1. Ridgel AL, Vitek JL, Alberts JL. Forced, not voluntary, exercise improves motor function in Parkinson's disease patients. *Neurorehabil Neural Repair*. 2009;23(6):600-608.

# Bike Layne

By Claire Rose Bernard

**T**he first thing Bruce Layne did when he heard about Dr. Jay Alberts' breakthrough related to Parkinson's disease (PD) and exercise was ask how he could help. Best known in Las Vegas as an insurance entrepreneur and philanthropist, Mr. Layne was diagnosed with PD in 1999.

During RAGBRAI, the renowned annual bike ride across Iowa, Dr. Alberts discovered that a PD patient riding on his tandem bicycle at a higher intensity than he would have been able to accomplish on his own experienced significant clinical improvement after the ride (see "Forced Exercise Holds Promise as a Novel Intervention for Parkinson's and Other Neurodegenerative Diseases," on page 12). Mr. Layne was fascinated that intensive exercise might impact PD. Since most of the studies showing the positive effects of exercise on PD had been conducted on animal models, Mr. Layne wanted to know if exercise could be effective in human PD patients as well.

He talked over his interest with the Prime Time Parkies (PTP), a group of local PD patients who meet monthly to discuss the trials and tribulations of this disease and contemplate new treatment approaches on the horizon. Together, they decided that forced exercise was so interesting and empowering that they would band together to champion Dr. Alberts and the forced exercise cause.

Mr. Layne and the PTPs cannot ride bikes. Even if they could, they could not ride them across the entire state of Iowa. But they could bring a taste of RAGBRAI to their desert community. In support of Dr. Alberts, the Team Bike Layne indoor spin class was born. The one thing Mr. Layne loves more than a challenge is pie, and since RAGBRAI is famous for the pies baked by Iowans and served along the route, he thought Team Bike Layne should have some pie, too. He enlisted the help of a baker at The Beat Coffeehouse, and together they came up with a new Parkinson's Peachy Pie for the riders to sample after their exercise.

If you are in Iowa during RAGBRAI, hop on a bike and join Dr. Alberts and the Pedaling for Parkinson's team. If you're in Vegas, jump on a stationary bike in the cool air conditioning. Either way, come exercise your brain and take a ride in the Bike Layne.



#### *About the Author:*

*Claire Rose Bernard is the executive director of the Layne Library ([www.thelaynelibrary.com](http://www.thelaynelibrary.com)), an organization founded by Bruce Layne. The Layne Library is a partner of Keep Memory Alive and supports Dr. Jay Alberts' Therapeutic Effects of Exercise on Parkinson's Disease study at the Cleveland Clinic Lou Ruvo Center for Brain Health.*

# Ali Fights to Raise Awareness of Parkinson's Disease

By Kathi Overstreet



When it comes to battling neurocognitive diseases like Parkinson's disease (PD), Rasheda Ali is every bit the fighter her father is. Ever since her father was diagnosed with Parkinson's, Rasheda — daughter of famed boxer Muhammad Ali — has championed research on the disease, enhanced education for families and society and increased resources for caregivers and service providers. Rasheda was the guest speaker for the weekly Lunch and Learn series for caregivers at the Cleveland Clinic Lou Ruvo Center for Brain Health on May 26.

Like many families, Ms. Ali's was unprepared for PD and had a lot to learn. She told a crowd of nearly two dozen inside the center's first-floor library that it's important for PD patients to be treated with respect. "Don't feel sorry for them. Love them. On the days they have difficulty speaking, communicate through board games and art, among other mediums. People with Parkinson's are the same people inside as they were before they had the disease-- they just can't communicate as well as they used to," she said.

A progressive, chronic brain condition that prompts cell loss in the region of the brain controlling movement, PD affects motor function. Ali wrote a book about the challenges she faced explaining PD to her children. "I'll Hold Your Hand So You Won't Fall: A Child's Guide to Parkinson's Disease" uses simple language and illustrations to give children insight into what is happening to their loved one.

Ms. Ali researched data on PD for six months, jotting down nuggets of information: 50,000 people in the United States are diagnosed with PD each year; the average age at diagnosis is 60; five to 10 percent of new cases occur in people under the age of 40; experts expect an explosion of neurocognitive diseases among the 50 million Baby Boomers set to retire in the next five years. Translating medical jargon into a form accessible to toddlers was difficult, but she did it, and the book includes medical facts that explain the condition well.

"Communication is a key part of this journey. Every day is different when living with PD, which can be perplexing to young children," said Ms. Ali, whose youngest son, Nico, 10, used to ask why his grandfather shook. "Parents tell me how their children have learned about PD from the book, and how as a family they now all have a better understanding about the disease. These parents get great pleasure when they hear their children using correct terms such as 'tremors.'"

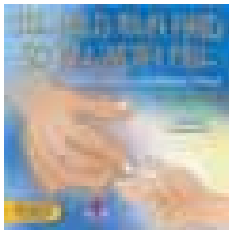
Ms. Ali has been traveling the world to lift awareness and promote fundraising for efforts to eradicate neurodegenerative diseases. Her friendship with Maureen Peckman, Chief Emerging Business Officer of Cleveland Clinic Nevada, prompted her visit to the Lou Ruvo Center for Brain Health.

"I love the partnership Larry Ruvo has created. He is a great visionary to bring such an asset to the community of Las Vegas," Ms. Ali said.

Ms. Ali closed her address with the following poem written by her father, Muhammad Ali.

### Champions Are Not Made in Gyms

*Champions are made from something they have deep inside them – a desire, a dream, a vision. They have to have last minute stamina; they have to be a little faster, they have to have the skill, and the will. But the will must be stronger than the skill.*



To learn more about this book, visit [RashedaAli.net](http://RashedaAli.net)

For additional information about Lunch and Learn events at the Cleveland Clinic Lou Ruvo Center for Brain Health, visit [keepmemoryalive.org/caregivers](http://keepmemoryalive.org/caregivers).

### About The Author:

*Kathi Overstreet is an office specialist who manages client visits to the Cleveland Clinic Lou Ruvo Center for Brain Health. She also writes for the Las Vegas Sentinel-Voice, which on June 3, 2010 published her article about Ali's visit.*

## Las Vegas Resources for Parkinson's Disease Patients and Their Families

Receiving a diagnosis of Parkinson's disease is a journey patients and their families need not walk alone. Below are some resources to contact for further information and support:

### Cleveland Clinic Lou Ruvo Center for Brain Health

Provides medical care and social and educational resources for patients with neurocognitive disorders and their families

Phone: 702.483.6000

Website: [www.clevelandclinic.org](http://www.clevelandclinic.org)

### American Parkinson's Disease Association (APDA), Southern Nevada Chapter

A national organization providing patient support, education and awareness

Jeri Giallanza, Coordinator

Charles Bernick, MD, Director

Phone: 702.464.3132

Email: [apdaparkinsonslasvegas@embarqmail.com](mailto:apdaparkinsonslasvegas@embarqmail.com)

### Layne eLibrary for Parkinson's

An online community for patients and researchers to exchange information

Phone: 702.574.9817

Email: [eLayneLibrary@gmail.com](mailto:eLayneLibrary@gmail.com)

Website: [www.elaynelibraries.org](http://www.elaynelibraries.org)

### PDtrials

Provides educational materials and information on clinical research trials being conducted in the U.S. and Canada.

Website: [www.pdtrials.org](http://www.pdtrials.org)

### Pedaling for Parkinson's

A non-profit organization that aims to improve quality of life for patients and caregivers and to educate patients, caregivers and the general public about the benefits of maintaining an active lifestyle after a Parkinson's diagnosis.

Website: [pedalingforparkinsons.org](http://pedalingforparkinsons.org)

# Employee Profile

## Laura Fritz: Connecting Contributors

Little did Keep Memory Alive's Senior Director of Development Laura Fritz know that her relationship with the organization began more than 40 years ago in the home of a childhood playmate named Buzzy Graves. Buzzy's older brother, Maddy, grew up to become a successful real estate developer and one of KMA's founding board members. Ms. Fritz went on to become a world record-shattering swimmer, Miss Nevada 1973, a state sewing champion and a highly successful development professional.

One afternoon during a routine tomboy play date of lizard hunting in the desert, Buzzy announced to Laura, "You have to leave now. I'm going to swim practice." Laura went home and announced to her mother, "My friend is going to swim practice. I want to swim, too." Tens of thousands of laps later (after flunking beginning swimming three times), Ms. Fritz set a world record in the 4,000 meter relay at the 1967 national championships. She was ranked 5th in the world individually in the 100 meter freestyle at the 1972 national championships. "Licking my wounds after failing to qualify for the 1972 Olympics, on a whim I entered the 1973 Miss Nevada contest. It was my first such pageant, and you can imagine my surprise at winning."



“People who give are part of a quest for a cure or have a desire to improve their community, make a difference or leave a legacy. In doing so, they receive internal satisfaction.” — Laura Fritz

Although her personal pursuits have often placed her in the limelight, Ms. Fritz generally shirks attention. When Larry King invited her to join seven other Miss USA contestants on his show prior to the national pageant, she declined. “I suppose it comes from too many hours spent in the pool, or perhaps the late-night airing of his show, but I really didn’t know who he was, didn’t have the money to spend extra days in New York before the Miss USA event and was too shy to ask my boss for the days off work.”

When asked why she’s not shy about fundraising, Ms. Fritz replies, “Because it’s for a greater good. People who give are part of a quest for a cure or have a desire to improve their community, make a difference or leave a legacy. In doing so, they receive internal satisfaction. Each of us has benefited from the gifts of others, be it enjoying the use of a special collection at a library, a meandering path through a rose garden or a scholarship.”

Ms. Fritz understands that charitable endeavors do not have a one-size-fits-all component. “When I meet with a potential donor, I try to determine if the cause I represent resonates. If not, I’ll bless them for giving to other organizations and ask if by chance they know anyone who might be a fit for ours,” she says.

When speaking with potential benefactors, Ms. Fritz often asks them to share their earliest memory of philanthropy, be it accompanying their mother to drop off old clothing at a church or trick-or-treating for UNICEF. She also inquires about how they felt when they were on the receiving end of someone else’s kindness, be it hand-me-down clothes or a special exhibit at a museum.

“You know, Keep Memory Alive has received over \$100 million in gifts. Almost all of it was donated by Nevadans for Nevadans,” she says. “Big gifts follow big vision. Look what Larry Ruvo’s vision has done for his home state.”

In her typically modest fashion, Ms. Fritz neglects to mention that since she joined the organization in December 2009, friends of Keep Memory Alive have committed millions.





## Never Too Young to Make a Difference

“If I could tell potential donors one thing, it would be that you don’t have to be old to make a difference,” says Scott Sibley, 36. “Absolutely,” echoes Stephanie, 32. So say their children — Anthony, 15; Zachary, 9; and Gavin, 6 — as well.

**F**or the Sibley’s, older relatives have served as role models for kindness and philanthropy, inspiring them at a young age to make a difference in the lives of others.

Mr. Sibley recollects fondly how his grandmother used to spoil him and his brother: “It wasn’t that she had a lot of money, it’s just that she was generous with her time and did what she could,” he says, recalling how his grandmother helped him with his paper route on Saturday mornings. “She would let me sleep in, then pick me up at 7 a.m., with the papers already folded neatly in a stack on the back seat of her car. Together, we would drive my route, making up for lost time.”

“She also used to take my older brother, Ford, and me to every museum and venue that a child might enjoy. Our grandmother would always insist upon buying us some little trinket at each and every gift shop,” he says.

As their grandmother’s Alzheimer’s developed over the last 12 years of her life, the family found it increasingly difficult to interact with her. “We used to talk to Nane all the time, but suddenly we couldn’t talk to her. She wasn’t dead, we just couldn’t talk to her,” Mrs. Sibley remembers.

While Nane’s condition worsened, the Sibley’s various business ventures took off.

*(continued on page 24)*

## Meet Our Volunteers | Sandy Runkle



Since the age of 14, Sandy Runkle dreamed of being a dancer in Las Vegas. She finally fulfilled that dream at age 64 after moving to Las Vegas and joining the University of Nevada Las Vegas' Senior Adult Theatre and Senior Jazz Dance. People who meet Ms. Runkle may wonder why a woman with so much motivational energy deferred her dream for 50 years. But a lot happened during those years, and it's everything that happened along the way that makes Ms. Runkle so fascinating.

In 1968, at the age of 24, Ms. Runkle found herself the mother of five young boys, each one year apart in age, and the wife of a man diagnosed with schizophrenia. When her husband was institutionalized for the first time, she spent more than a year on welfare. She was amazed to find how resourceful she could be at stretching \$207 a month to feed, clothe and house her family of seven. With a bit of good fortune, answers to prayers and charisma, Ms. Runkle secured a tuition loan, the gift of a car and the gift of babysitting services, which allowed her to return to school and become a court reporter. She maintained her intellectually and financially satisfying career for 24 years. While she worked her way through school and spent countless hours practicing on the stenotype machine, Ms. Runkle recalls saying to herself, "We will never be hungry again."

Along with this resolution came two more: creating a normal

life for her sons, despite the challenges their father's periodic institutionalization presented, and honoring what has become a lifelong commitment to advocating for mental health/brain disorder issues.

Fast forward to 1994 and Ms. Runkle's arrival in Las Vegas, where she met Sam, the love of her life. They spent a beautiful 10 years together riding a Harley, riding in their 1979 Mercedes convertible and spending time in Mazatlan, Mexico. After Sam's death in 2004, she immersed herself in the city's theatrical opportunities, taking lessons from some of the Strip's iconic performers.

As part of her involvement in senior issues at UNLV, Ms. Runkle obtained a Certificate in Gerontology and, in the fall of 2008, served as a panel moderator at the university's Conference on Aging. Panelist Charles Bernick, MD, now associate medical director of the Cleveland Clinic Lou Ruvo Center for Brain Health, suggested she keep an eye out for the center's opening and sign up as a volunteer. Ms. Runkle became the first volunteer.

Ms. Runkle enjoys working with director of volunteer services Dee King, who allows her to select interesting assignments and carry them out in her own way. To date, Ms. Runkle has volunteered at the annual galas, welcomed guests at numerous fundraising events and greeted patients arriving at the center. She especially enjoys giving tours. On June 29, 2010, Ms. Runkle performed in "Caregiver Collage," a reader's theatre performance by UNLV's Senior Adult Theatre that addressed the challenges of being a caregiver (see article on page 37).

Today, 50 years after first dreaming of dancing in Las Vegas, Ms. Runkle counts among her friends a number of retired showgirls, entertainers, UNLV students and Lou Ruvo Center for Brain Health volunteers. She will work as much as needed to further the research and development of a cure for all brain disorders taking place here at the Lou Ruvo Center for Brain Health and changing the state's healthcare landscape, as well as the burdened lives of millions.



# Meet Our Volunteers | Judi Hanson



For the first 42 of their now 46-year marriage, Judi and David Hanson ran a print shop in South Bend, Indiana. In 2006, they sold the business and retired to Las Vegas, where the couple had cherished rare vacations away from the family business. Ms. Hanson vowed she would make “getting involved” a priority, since business had always kept her too busy for community activity.

Get involved she has. In addition to playing Chinese Mahjong once a week, women’s poker once a month and bowling two or three times a week, Ms. Hanson serves on the board of her local homeowners’ association, as well as their master homeowners’ association. As treasurer for the latter since 2008, she is responsible today for almost \$5 million in dues.

Ms. Hanson also joined Las Vegas’ Westside Newcomers Club in 2007, and was elected its treasurer in 2008 and president in 2009. “I have been responsible for relaxing some of the bylaws to make the club more accessible to women who have lived in the community for longer than five years but, upon the retirement or the passing of a husband, needed to make friends,” she says.

In the fall of 2009, Keep Memory Alive’s Maureen Peckman spoke to the Westside Newcomer’s Club, inspiring Ms. Hanson and several other listeners to become volunteers at the newly opened Cleveland Clinic Lou Ruvo Center for Brain Health.

“She was so passionate and articulate,” Ms. Hanson remembers.

For Ms. Hanson, the connection was personal. Her father had died of dementia at age 91 in March 2008; in April 2008 her mother passed away from Alzheimer’s at the age of 96.

“The striking thing was that dad, her caregiver, passed first. When mom was told, she thought it was her father who had died. It wasn’t until I got her to the funeral home that mom realized it was her husband. I will always remember that,” Ms. Hanson recollects.

As I was leaving the funeral in Indiana, I told my boys that I would be back within two months. It wasn’t six weeks after dad’s death that I was back to bury my mother.”

Through her involvement in the Lou Ruvo Center for Brain Health community, Ms. Hanson has found friendship and role models for dealing with dementia. She says, “One of the people who inspires me, and who is a fantastic volunteer, is Jean Georges. She amazes me, not only a caregiver, but as a volunteer as well. We need more people like Jean in our lives.”

As for her responsibilities at the center, Ms. Hanson credits Dee King, Director of Volunteer Services, for giving her the latitude to select interesting jobs, which have included compiling a volunteer scrapbook, keeping the content of a digital picture frame fresh and writing the monthly newsletter for volunteers. She also participates in the Speakers Bureau, is responsible for scheduling volunteers in the library and volunteers at the annual Power of Love gala, where she is astounded by the amount of money raised each year.

“If you have a personal connection, it is highly compelling to be here and to give back,” Ms. Hanson proclaims.

To relax from all of the responsibility of being involved in her community, Ms. Hanson walks from three to six miles daily. “This is when I do a lot of my thinking. When I don’t walk, I feel I’ve cheated myself out of something special,” she says. She also enjoys traveling, and has taken cruises to Asia and the Baltic and is looking forward to her second African safari.

**(Never Too Young To Make A Difference continued from page 21)**

“We have been diligent about bringing the children to work with us on weekends, so they can witness the hard work that goes into running a business, as well as enjoy the benefits,” says Ms. Sibley, the chief operating officer of Nevada Legal News. Mr. Sibley is chief executive officer of the company.

“Stephanie was born in Las Vegas, but I moved here at the age of 18 to join my Great Uncle Hoyt’s business. He was always giving back to the community, be it formal donations or simply offering a man down-on-his luck some money in exchange for picking up trash and keeping the area around our business neat. Watching my uncle made me realize no act of kindness is too small,” Mr. Sibley recalls.

Mr. and Mrs. Sibley pride themselves in being open and supportive with their children. When one of Zachary’s friends passed away from leukemia at the age of 7, the entire family attended the funeral. Since that time, all five have been involved in recruiting potential bone marrow donors and are proud that some of their recruits have been matches for those in need. In February 2010, Mr. and Mrs. Sibley attended their first Keep Memory Alive Power of Love gala. Touched by the leadership role Keep Memory Alive was taking in the disease that affected his grandmother, Mr. Sibley sent an email that evening saying that he’d like to make a gift in honor of Nane. Within a week, Mr. and Mrs. Sibley, accompanied by their oldest son, Anthony, toured the Cleveland Clinic Lou Ruvo Center for Brain Health. Having grown up with his father’s recounts of Nane’s generosity and the infamous trips to gift shops, when Anthony heard that the family could make a gift that would put his grandmother’s name on the center, he exclaimed, “Dad! Do it for Nane!”

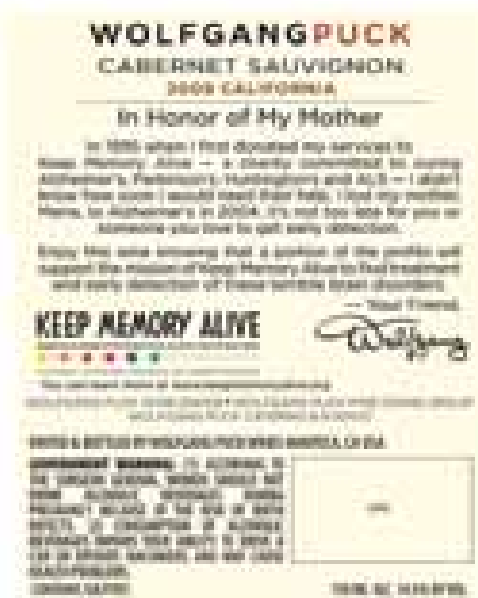
In a matter of minutes his parents had acquiesced to his plea. After the family’s commitment was confirmed with a handshake and Louise “Nane” Cotugno’s generosity memorialized by her family, Anthony turned to his father and said, “Well, Dad, once again I guess you won’t be getting that new car!”

“Anthony is proud of us, and that makes us so happy,” says Stephanie. “He knows we get a lot more joy from giving than from collecting things. We would be so happy if our gift to the Lou Ruvo Center for Brain Health would help find a cure for Alzheimer’s for our children’s generation.”



# Wolfgang Puck Creates Wine to Support Keep Memory Alive

Named in honor of Wolfgang's mother, the Maria Puck Café at KMA's headquarters in Las Vegas



In 1995 when Wolfgang Puck began donating his services to Keep Memory Alive — a charity committed to eradicating Alzheimer's disease — little did he know the disease would strike so close to home. He lost his mother, Maria, to Alzheimer's in 2004.

"If my family had known the importance of early detection, perhaps she would be with us today," he says.

Wolfgang Puck has been a part of KMA since the organization's first gala, which was held in 1996 at Spago, his first of what has grown into six Las Vegas restaurants today. This year he is unveiling a new wine label, whose sales will support KMA. Under the guidance of their master sommelier group, Mr. Puck and his executive team sourced four wines from a fantastic producer in California: a chardonnay, merlot, cabernet and sauvignon blanc.

Beginning in Winter 2010, you will be able to enjoy these wines in any of Wolfgang Puck's fine dining, casual dining or catering outlets and know that a portion of the proceeds will support the mission of Keep Memory Alive: to find a cure for Alzheimer's and improve the quality of life for our friends and families.

"I am very excited about this new wine, and the opportunity it allows me to honor my mother and Keep Memory Alive," says Wolfgang Puck.

## Rodeo Rolls into Lake Tahoe: July 23-24

For more than 50 years the summer rodeo was an annual highlight in the Tahoe area, until it was discontinued in 1965. Camille and Larry Ruvo, along with cowboy Waco McGill, resurrected the Shakespeare Ranch Rodeo in 2000. Now a fundraiser for Keep Memory Alive and Cleveland Clinic Lou Ruvo Center for Brain Health, the July 23, 2010 rodeo featured bull riding, bronc riding, barrel racing and a watermelon contest for children, along with a buffet barbeque. The 2010 event was enjoyed by more than 300 guests.

The next evening, 85 guests enjoyed an intimate dinner with Chef Emeril Lagasse. Fierce bidding during a short, 15-minute auction raised more than \$315,000. One of the evening's highlights was Larry Ruvo bidding \$50,000 to secure a serenade for his wife, Camille, sung by the legendary Lionel Richie. She promptly and graciously gave it to the couple's friends and long-time Keep Memory Alive Supporters, Roseanne and Barry Stull, who were celebrating their 39th anniversary that weekend. Lionel Richie adapted his lyrics on the spur of the moment, customizing "You Are So Beautiful" in honor of the Stulls, whose looks of astonishment touched the audience.

He then sang "Happy Birthday" to Shellie Kim. Another memorable moment was watching Lionel Richie and Emeril Lagasse join America on the occasion of the band's 40th anniversary in singing their iconic song, "A Horse with No Name."



*Michael Milken, Emeril Lagasse, and Lori Milken*



*Lionel Richie sings "Happy Birthday" to Shellie Kim*



*Chef Emeril Lagasse and Lionel Richie join the band America in singing "A Horse with No Name"*



## Save the Date:

The next  
**Keep Memory Alive** gala  
will take place on Saturday,  
**February 26, 2011,**  
at the  
Bellagio Resort & Casino  
in Las Vegas.  
Mark your calendars today!



# An Evening to Remember So That No One Will Ever Forget

**O**n February 27, 2010, Keep Memory Alive hosted its 14th Annual Gala, with Barry Manilow headlining on stage, while chefs Thomas Keller and Wolfgang Puck entertained the palate. Memorable moments included:

- The auctioning of two Mercedes SLS for \$260,000 each.
- A tennis lesson and lunch with Andre Agassi and Steffi Graf that sold for \$130,000.
- Brad Garrett rallying the crowd to bid on a star-studded poker game featuring his friend, Ray Romano, which went for \$100,000. As Garrett reported from personal experience playing poker with Romano, “You have not lived until you have seen a person with more money than God complain about losing \$4 on a poker hand.”
- Danny DeVito, who took off a shoe, snapped a photo from his mobile phone, and announced he was going to Tweet his experience at the gala as well as donate a lunch in his trailer back at the studio.
- Red carpet sightings of Holly Madison, Leeza Gibbons, Rhea Pearlman, David Brenner and Siegfried & Roy.



*Chuck and Stacey Matthewson,  
Wolfgang and Gelila Puck,  
Larry and Camille Ruvo,  
Thomas Keller and Laura Cunningham*



*Brianna, Camille, Larry, Lauren, and  
Nicole Ruvo*





In the first five weeks following its May 1, 2010 opening, the Keep Memory Alive Event Center hosted 10 events. According to Hospitality Project Manager Gina Sinclair, who oversees the Frank Gehry-designed space, feedback continues to center around a handful of recurring themes:

*"It's great to know that the usage fee for the space goes to a good cause."*

*"Hosting an event in this Gehry space is like being inside a work of art."*

*"We appreciate the uniqueness of the furnishings, all of which show a Gehry influence."*

*"The outdoor spaces [breezeway and garden] facilitate interaction with the environment and eliminate the feeling of being cooped up in a windowless, internal space."*

*"The food is amazing."*

*"The sound quality and acoustics are spectacular."*

Events have ranged in size from 50 to 800 people, and have included a bat mitzvah, a graduation party, cocktail and dinner parties, an employee rally, continuing medical education seminars and a charity gala.

As the story goes, architect Frank Gehry had long been reluctant to build in Las Vegas. With the Cleveland Clinic Lou Ruvo Center for Brain Health project, he was persuaded by a personal connection with the neurocognitive disorders the facility would treat and by the opportunity to create an event space that would function as a perpetual source of funding for the medical facility.

On the medical side, Keep Memory Alive is committed to preserving memory. On the event side, it is committed to creating memories. "We encourage those renting the Keep Memory Alive Event Center to 'Host an event to remember, so that others will never forget.' Proceeds from the space do, in fact, support the research projects and enhanced treatment occurring within the medical facility," says Ms. Sinclair. "I am so proud of the experiences I get to witness when our guests host events."

### Join the Experience

The Cleveland Clinic Lou Ruvo Center for Brain Health customizes each gathering at the Event Center. We combine the ultimate in hospitality with a focus on detail and individualized attention to produce an unrivaled guest experience.

Just as none of the 199 windows in the canopy over our Frank Gehry-designed event space are alike, neither will your event be like any other. We are committed to presenting a selection of world-class dining options. To complement the meal, we serve some of the world's rarest and most prized wines and top-shelf spirits. Our bespoke beverage selection can be tailored to your discerning palate.

Revenue collected by Keep Memory Alive for use of the Event Center supports the Lou Ruvo Center for Brain Health's core mission of enhanced treatments and, ultimately, a cure for neurocognitive disorders.

To inquire about availability of the Event Center, please contact Keep Memory Alive at 702.263.9797 or [eventcenter@keepmemoryalive.org](mailto:eventcenter@keepmemoryalive.org)

## Community Programs, January-June 2010

The following is a sample of programs provided by members of the staff of Cleveland Clinic Lou Ruvo Center for Brain Health in the Nevada community from January through June 2010.

### **An Overview of the Social Services and Caregiver Programs Offered Cleveland Clinic Lou Ruvo Center for Brain Health**

Rotary Club of North Las Vegas, Nevada

*Susan Hirsch, MSW, LSW*

**June 9, 2010**

### **Resources for Caregivers:**

#### **How to Find the Help You Need**

Cleveland Clinic Lou Ruvo Center for Brain Health

*Jennifer Gayan, MSW, CSW-I*

**June 2, 2010**

### **Characteristics of Grief and Loss**

#### **Associated with Dementia**

University of Nevada Las Vegas

Death and Dying Class

*Susan Hirsch, MSW, LSW*

**May 17, 2010**

### **Challenging Behaviors: Re-Thinking Your Approach Alzheimer's Association 7th Annual Southern Nevada Caregiver Conference-Caregiving: It Takes Creativity, Humor, Support...Finding the Balance**

Texas Station Gambling Hall and Hotel,

Las Vegas, Nevada

*Donna Munic, PhD*

**April 21, 2010**

### **Understanding Dementia and Optimizing Brain Health**

Foster Grandparents Conference

Las Vegas, Nevada

*Susan Hirsch, MSW, LSW*

**April 1, 2010**

### **The Power of Reminiscing**

Cleveland Clinic Lou Ruvo Center for Brain Health

*Donna Munic, PhD*

**March 31, 2010**

### **Understanding Dementia and Optimizing Brain Health**

Retired Public Employees, Henderson Chapter

Henderson, Nevada

*Susan Hirsch, MSW, LSW*

**January 11, 2010**



*Attendees at Art Curator Libby Lumpkin's (far right) June 23 presentation on Art at the Ruvo Center, a part of the "Lunch & Learn" weekly lecture series*

## StoryCorps as Heard on National Public Radio

“When a member of the StoryCorps staff called to ask if the Cleveland Clinic Lou Ruvo Center for Brain Health was interested in being a host site for their recording visit to Las Vegas, we immediately agreed. Being familiar with StoryCorps, an organization dedicated to recording individual life stories, we knew that this opportunity was a perfect fit with our focus on preserving memories,” says Susan Hirsch, Director of Social Services.

On May 20, 2010, six families participated by recording their personal stories and recollections for the StoryCorps Memory Loss Initiative, which is striving to create the largest oral history collection in the U.S.. All recordings are housed at the Library of Congress, and selected stories are broadcast on National Public Radio.

A highlight of StoryCorps' visit was an interview with Keep Memory Alive Chairman Larry Ruvo and his mother, Angie. Mrs. Ruvo reminisced about her husband, Lou, who died of Alzheimer's.

Charles Bernick, MD, Associate Medical Director of the Lou Ruvo Center for Brain Health, and his mother Ellen participated in one of the StoryCorps interviews. As a follow-up to the visit, Dr. Bernick was asked to join a panel discussion on memory loss and the StoryCorps project on the Nevada public radio station KNPR. In this June 22 interview, he talked about his professional role treating patients with dementia, as well as his personal experience caring for his mother, who has Alzheimer's disease. An archive of this show is available at:  
[knpr.org/son/archive/detail2.cfm?SegmentID=7005&ProgramID=1987](http://knpr.org/son/archive/detail2.cfm?SegmentID=7005&ProgramID=1987)

StoryCorps encourages everyone to preserve their life stories and recollections and offers a “Do It Yourself Kit” on line at: [storycorps.org](http://storycorps.org)



*Ellen Bernick and son, Charles*



*Lou, Larry, and Angie Ruvo*

# Taking Care of Business: A Summit on Employee Caregivers

## Contact Us For More Information:

To receive a brochure for **Taking Care of Business: A Summit on Employee Caregivers**, contact Susan Hirsch at 702.483.6023 or [hirschs2@ccf.org](mailto:hirschs2@ccf.org)

Employees who are caregivers cost businesses an estimated \$17-33 billion yearly in lost productivity and increased costs. Caregiving-related absenteeism, workday interruptions, unpaid leave, illness and the need to replace employees who quit their jobs to become full-time caregivers have a profound impact on the bottom line of U.S. businesses.

To increase awareness and understanding of the key issues related to caregivers in the workplace, Cleveland Clinic Lou Ruvo Center for Brain Health and the American Association of Retired Persons (AARP) have partnered to host a half-day summit in Las Vegas.

The summit will offer information about the significant effects of caregiving on businesses and identify successful approaches that employers can adapt to support their employees and reduce associated costs. Human resource managers and leaders in business and government will want to take advantage of this opportunity.

Speakers will include experts in caregiving issues in the workplace, business leaders who have implemented successful strategies and employees with first-hand experience being caregivers. Attendees will receive a tool kit with information on viable solutions, best practices and resources that can be adapted to any workplace.

Harrah's Entertainment and Greenspun Media Group are co-sponsoring the event.

Please visit our website, [keepmemoryalive.org](http://keepmemoryalive.org), for a confirmation of the date for what promises to be an interesting and informative event.

## Ongoing Support Services for Caregivers

**A**t the Cleveland Clinic Lou Ruvo Center for Brain Health, all services for caregivers are open to the community. For information or to join the mailing list for upcoming events, contact Jennifer Gayan, Clinical Social Worker, at 702.483.6036 or [gayanj@ccf.org](mailto:gayanj@ccf.org)

### Social Services

Family Support Program: Counseling and support for spouses and families caring for a loved one with dementia at home

Individual, couples and family therapy to address concerns regarding the diagnosis of a neurocognitive disorder or caregiving-related issues

### Support Groups

Weekly support group meets Wednesdays from 1–2:30 p.m.: Caregivers and family members of all ages caring for a loved one with dementia are welcome to participate. Contact Donna Munic, PhD, at 702.483.6035.

Caregiving Dynamics: Four 90-minute sessions combine education and therapy for individuals caring for loved ones with dementia. The sessions encompass an introduction to disease, coping with life changes, communication and behaviors and taking care of yourself. For dates and times, contact Jennifer Gayan at 702.483.6036.

### Caregiver Education

Weekly Lunch and Learn programs are held on Wednesdays from 12 noon–1 pm (see [keepmemoryalive.org](http://keepmemoryalive.org) for topics)

October workshops on Planning for the Holidays (see [keepmemoryalive.org](http://keepmemoryalive.org) for dates)

### Lending Library

A resource for books, DVDs and other materials about all aspects of caregiving, our lending library is open Monday through Thursday from 10 am–2 pm, and by appointment. Trained library volunteers can help you find the resource you need. You can access our catalog online at [keepmemoryalive.org](http://keepmemoryalive.org)

## The Family Support Program

**T**he Family Support Program is a new service designed to support caregivers living with a spouse or partner with dementia.

The program utilizes counseling to help caregivers:

- Maximize available social and family support
- Reduce stress related to caregiving
- Find and access community resources
- Better understand the disease
- Learn strategies to manage challenging situations

Caregivers of any age living with a spouse with dementia can participate in the Family Support Program.

The Family Support Program includes:

- An initial screening and assessment
- Two counseling sessions for the spouse caregiver
- Four family/friend sessions
- Support group participation
- Ongoing support by phone as needed.

Caregivers who have participated in this proven program report enhanced support from family and friends as well as benefits to their wellbeing that include reduced caregiver depression, improved physical health and increased ability to address problems and behaviors associated with caring for a spouse with dementia.

The Family Support Program is available at no cost. Funding is provided by a grant from the Rosalynn Carter Institute/Johnson & Johnson Caregivers Program. For additional information, please contact Jennifer Gayan, Clinical Social Worker, Cleveland Clinic Lou Ruvo Center for Brain Health, at 702-483-6036 or [gayanj@ccf.org](mailto:gayanj@ccf.org)

## Caregiver Collage

“I didn’t choose this. We were supposed to grow old together. Instead, he grew younger. I have to do everything for her. This is my mother. My father. My wife. My husband. My sister. My friend.”

(Opening lines from “Caregiver Collage”)

**O**n June 29, over 200 individuals gathered in the Keep Memory Alive Event Center to witness an extraordinary theater production called “Caregiver Collage.” Performed in reader’s theater style, Caregiver Collage brought to life with empathy, compassion and humor many of the situations and feelings experienced by caregivers. The play was written by Douglas Hill, Associate Professor of Senior Adult Theatre at University of Nevada Las Vegas (UNLV), and performed by students in this program. Eight actors depicted a variety of caregiving experiences, including caring for a parent in their home, long-distance caregiving and older spouses with their own health challenges caring for their partners. Emotions commonly experienced by caregivers, such as stress, anxiety, denial, anger and loss, were highlighted in the vignettes and interspersed with moments of kindness, humility and laughter.

Following the performance, members of the cast and audience were asked to share their reactions to the performance. With great emotion, individuals expressed gratitude that their experiences were being brought to light and proceeded to share personal stories about the impact of caregiving on their relationships and their lives. Susan Hirsch, Director of Social Services at Cleveland Clinic Lou Ruvo Center for Brain Health, confirmed that the goals for this special event included heightening awareness of the range of experiences and emotions associated with caregiving and offering a forum where caregivers and families could connect with others in similar circumstances.

Caregiver Collage was originally written in the fall of 2009 as part of a joint educational series for caregivers co-sponsored by the Lou Ruvo Center for Brain Health and UNLV. Ongoing special events for caregivers and family members are planned as part of the Center for Brain Health’s social services and caregiver educational programs.

### Actors in Caregiver Collage:

*Sandy Runkle*



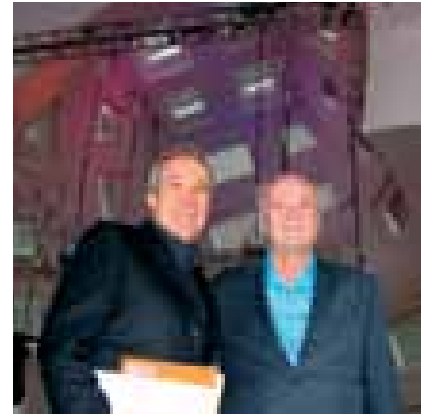
*Vince Ragazzo and Marion Stedman*



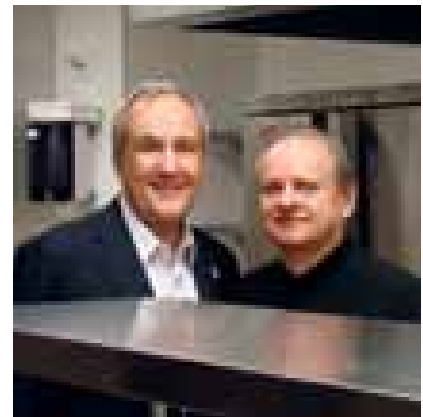
# Photo Gallery



Frank Gehry and Larry Ruvo conduct a site inspection



Artist James Rosenquist visits the KMA Event Center with Larry Ruvo



Chef Joel Robuchon tours the Wolfgang Puck-designed kitchen in the Keep Memory Alive Event Center



Former President George Bush makes a surprise visit to the Cleveland Clinic Lou Ruvo Center for Brain Health

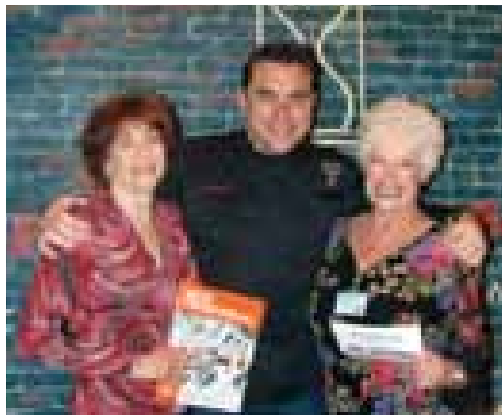


Legendary entertainer Steve Lawrence gets a warm welcome from Officer Pete Bleckwehl





Noted orthopedist Dr. Richard Steadman and colleagues enjoy a wine tasting at the Lou Ruvo Center for Brain Health



Volunteers Gail Romero (L) and Sandy Runkle (R) represent Keep Memory Alive at the opening of Chef Todd English's PUB at CityCenter in Las Vegas, an event that benefitted KMA



Singer Paul Anka tours the Lou Ruvo Center for Brain Health with KMA Chairman Larry Ruvo



Willard Hackerman, President and CEO of The Whiting-Turner Contracting Company that oversaw construction of the Lou Ruvo Center for Brain Health, discusses with Larry Ruvo a job well done



The Red Hat Society visits

Photo Gallery



KMA's Senior Director of Development Laura Fritz thanks (L to R) Mario Drago, Robert Keck and Frank Prezgay for hosting a golf tournament benefitting KMA



Larry Ruvo shows Former Massachusetts Governor Mitt Romney around the center



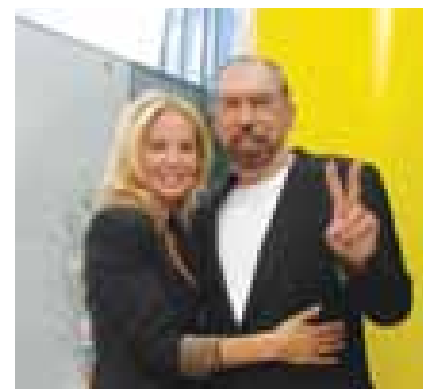
Pascal Sanchez (L) and Chef Pierre Gagnaire visit the Lou Ruvo Center for Brain Health with Larry Ruvo



Architect Frank Gehry makes a final pre-opening visit to the Center, exclaiming, "We knew it was going to be special. I didn't know it was going to be spectacular."



KMA Chef Gustav Mauler and White House Chef Edwin Scholly joined forces during a Johnson & Johnson reception in KMA's new Event Center



Eloise and John Paul DeJoria of Paul Mitchell are KMA enthusiasts

# Frank Gehry Donates Artwork to Cleveland Clinic



*Sugar illuminated at night in the Betty Fulton Reflections Garden*

The May 21, 2010 grand opening of the Cleveland Clinic Lou Ruvo Center for Brain Health was made even grander by the unveiling of Peter Alexander's sculpture entitled "Sugar." The pyramid-shaped sculpture, which had been installed in the Betty Fulton Reflections Garden the previous day, was a gift from Lou Ruvo Center for Brain Health architect Frank Gehry. The work had been created especially for Mr. Gehry in 2007, and had been on display in the breezeway of the Gehry Studio since that time.

During daylight hours, its 20 tons of blue-green glass sparkle brilliantly in the desert sunshine. LED lights installed in the interior of the sculpture come on automatically at dusk, giving the piece a deep, luminescent glow.

"Already the sculpture has become a popular favorite," says Libby Lumpkin, Art Curator for Keep Memory Alive. "All day and into the night I see a steady stream of people walking up to it, often photographing it."

"We are absolutely thrilled that Mr. Gehry has made this incredibly generous gift. This work is the first gift of art made to the center and is all the more meaningful, because it comes from our architect," she says.

Mr. Gehry decided to make the donation when he visited to inspect the nearly completed Keep Memory Alive Event Center. Mr. Alexander accompanied Mr. Gehry on that visit.

As they were walking around the grounds with Keep Memory Alive Chairman Larry Ruvo, Mr. Gehry was struck with the idea that the sculpture would be perfect for the garden. He pulled Mr. Alexander aside to ask if he would agree, and then offered the gift to Mr. Ruvo. "No arm twisting was required!" Ms. Lumpkin says.

Mr. Alexander discovered the unusual, rock-shaped pieces of glass in Henrietta, Oklahoma. It was remnant slag glass that had accumulated at a Pittsburgh plate glass company between 1928 and 1972, when the factory closed.

"The process they used is obsolete now, so this kind of glass has become extremely rare," Mr. Alexander explains. "Even this cache of slag glass would be gone, but for the fact that an employee of the company had it transported to empty land he owned when the factory was torn down. It had been lying on the ground, partially buried, for all these years, which gives it a weathered look. I was lucky to have found it," he says.

According to Mr. Alexander, the title of the sculpture, "Sugar," was inspired by the Burl Ives song, "Big Rock Candy Mountain."

**Art at the Center: Two Programs**

**The Art Gift Program** allows the center to accept gifts of art that will remain a part of the center's permanent collection. These gifts are subject to approval by a board composed of directors and curators from Cleveland's Museum of Art. They help ensure each work is important, appropriate for a health institution and adds value to the center's art education programs.

**Keep Memory Alive's Art Consignment Program** allows artists to display works for sale in the center. Profits support Keep Memory Alive. Among the works on consignment are some by artists close to Frank Gehry. Peter Alexander has provided one of his signature resin pieces. Ken Price, who will have an exhibition at the Metropolitan Museum of Art next year, has sent a ceramic sculpture. Ed Moses, one of Frank Gehry's oldest friends, has sent two paintings designed as screens.

"We are grateful to the artists who take part in this program, which allows us to display important works of art and constantly change the exhibition," says Ms. Lumpkin.



*For sale through the Art Consignment Program: Acrylic on plywood on aluminum frame; 2 panels, 78 x 36 inches each, by Ed Moses*



*Artist Peter Alexander put finishing the touches on Sugar.*

## Center for Brain Health Twice Honored by In Business Las Vegas

### 2010 Angel Awards Humanitarian of the Year: Larry Ruvo

At a reception on June 24, 2010, at Planet Hollywood Resort & Casino, In Business Las Vegas honored Keep Memory Alive Chairman Larry Ruvo with an Angel Award, naming him "Humanitarian of the Year." Mr. Ruvo was recognized for his profound philanthropic impact on the Las Vegas community, including his help in establishing The Meadows School and spearheading UNLVino, the largest wine-tasting event in Nevada for more than 35 years. The profits from UNLVino support scholarships for students at UNLV's College of Hotel Administration. Mr. Ruvo's crowning achievement, however, is the Cleveland Clinic Lou Ruvo Center for Brain Health.

Mr. Ruvo was out of the country at the time of the award ceremony, so Keep Memory Alive board member Michael Severino accepted on his behalf, comparing Mr. Ruvo's tenacity to that of a boxer:

*"I equate the past 15 years to a 15-round fight with two heavyweight champions in the ring: Larry Ruvo and this terrible illness called Alzheimer's. Larry, of course, was the odds-on favorite. The incredible stamina that he displayed will no doubt become legendary. Like a spiritual force of nature, he took the hardest punches, sharpest jabs and, sometimes, some low blows, but never faltered with an unrelenting purpose to win.*

*And because of this great fight, Larry has built the Madison Square Garden for the fight against neurodegenerative diseases. And Las Vegas will not only become the fight capital of the world physically, but mentally as well, because of the Lou Ruvo Center for Brain Health."* — Michael Severino



Michael Severino (L) accepts the award on Mr. Ruvo's behalf from Publisher Bruce Spotleson



Dr. Bernick surrounded by his colleagues at the Center for Brain Health, L to R: Kathi Overstreet, Mandy Penko, Stacey Gorniak, Susan Hirsch, Charles' mom, Ellen Bernick, Charles Bernick, MD, Nicole Wolf, Beverly Bowen



Publisher Bruce Spotleson (L) presents The Healthcare Headliner award to Dr. Charles Bernick

#### 2010 Healthcare Headliner Charles Bernick, MD

At a reception on April 8, 2010, six colleagues from the Cleveland Clinic Lou Ruvo Center for Brain Health joined neurologist Charles Bernick, MD, his wife Julia, and his mother Ellen at a reception at Loews Lake Las Vegas honoring the 2010 Healthcare Headliners. In Business Las Vegas recognized Dr. Bernick in the category of research/scientist. An excerpt from their article reads:

*“First of all, the brain is where it’s at – it’s what makes humans ‘humans,’ ” said Bernick, adding that the field of neurology can be likened to a deductive science. “The nervous system is a very organized system, and your mission is to find where the problem is.”*

*On the research side, “There are two real thrusts in the field of Alzheimer’s,” Bernick said, “and those are finding a means of early detection through spinal imaging of the brain or by looking for markers in the blood or spinal fluid, and also finding treatments that may delay the progression of the disease, and we are in a number of studies of new drugs to do just that. Are we going to cure Alzheimer’s disease in five years? Probably not. But I think we’re close, and we’ll be able to make a significant impact through early detection and disease modification.”*

Bernick, who is responsible for establishing and maintaining a tele-health program that has provided rural Nevadans with dementia care, caregiver services and one-on-one virtual patient conferences, divides his time among patient care and research.



**What happens in Vegas  
will benefit the rest of the world.**



**Cleveland Clinic**  
Lou Ruvo Center for Brain Health

In partnership with Keep Memory Alive Organization.  
Learn more. [clevelandclinicfacts.org](http://clevelandclinicfacts.org).

# KEEP MEMORY ALIVE

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



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