

# BRAIN RESEARCH DISCOVERIES™

USF HEALTH BYRD ALZHEIMER'S INSTITUTE

SPRING / SUMMER 2013

**3 Dr. David Kang:  
New insights into the brain's  
molecular pathways**

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**6 Poised to become a nationwide  
model: Memory screenings  
for East Tampa's older  
African-Americans**

---

**10 Q & A with Robert Hauser, MD  
USF Health Parkinson's  
Disease and Movement  
Disorders Center**

---

**12 Understanding and coping  
with Lewy body dementia**

---

**14 Donor Profile: Mrs. Pat Bunch**

---

**16 Making a difference in our  
communities**

Illustration of brain-derived hippocampal cells. The blue shows nuclei (i.e., the place where DNA resides). The red shows architecture of nerve cells inside (i.e. bones of cells). The green depicts a cellular protein that physically binds to the cellular architecture (filamin A).

## Within our reach.

CARMEN SCETTINO



Like many of you, I was extremely pleased to hear U.S. President Barack Obama mention Alzheimer's research during his 2013 State of the Union Address. At the USF Health Byrd Alzheimer's Institute, we believe preventing Alzheimer's and delaying the disease progression is well within our reach.

In this issue, you will learn how one scientist is looking at chemicals known as neurotransmitters and what causes their functioning in communication between nerve cells to break down. This is one of many ways our researchers are working to identify therapeutic drugs that do not just target the symptoms of Alzheimer's, but eliminate the harmful plaques in the brain. As a translational research center, where frequent interaction occurs between scientists and physicians, we understand the need for ideas to move from research laboratories to clinical studies involving patients. One of the biggest breakthroughs we have learned is that amyloid protein is building up in the brain years before the disease even starts. To adequately test viable drugs, it is important that patients who are most at-risk for Alzheimer's are screened early for symptoms of memory loss, and our faculty is doing just that.

Through the generous support of Kendal Charitable Funds, an umbrella organization for various philanthropic endeavors of The Kendal Corporation, the Byrd Institute has developed an Alzheimer's disease screening program that can be adapted nationwide. The Institute is the first and only organization to receive Kendal Charitable Funds' Promising Innovations award, which will help us provide screenings for Alzheimer's and other diseases causing memory loss to residents of East Tampa, a medically underserved, predominantly African-American community. According to the Alzheimer's Association, older African-Americans are twice as likely as older whites to develop Alzheimer's disease and other forms of dementia. Thanks to the dedication of the Tampa Bay Chapter of the National Black Nurses Association, the Byrd Institute will train retired nurses to conduct memory screenings and provide education about risk factors to East Tampa residents.

I genuinely believe we can prevent Alzheimer's by 2020. Through meaningful collaborations to help raise public understanding and awareness of the disease, the goal of prevention is attainable. I am delighted to introduce you to one of our donors, Pat Bunch, who epitomizes the portrait of a tireless caregiver who is committed to the fight against Alzheimer's disease, which claimed the life of her late husband, Ray. The USF Health Byrd Alzheimer's Institute is now a member of the LEAD coalition (Leaders Engaged on Alzheimer's Disease), a national network of key organizations committed to advocating for a legislative agenda to detect, prevent and cure Alzheimer's disease. Together with caregivers like Pat and organizations such as the LEAD coalition, we are positioned to make the fight against Alzheimer's a national priority.

*until Alzheimer's is a memory™*

Dave Morgan, PhD  
CHIEF EXECUTIVE OFFICER

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## BRAIN RESEARCH DISCOVERIES

Spring / Summer 2013

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Writer  
Mark Zaloudek

Copy Editor  
Susan Hicks

Graphic Designer  
Rosie White

Photographers  
Charles Shockley  
Alex Stafford  
Eric Youngmans

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**USF** USF Health Byrd Alzheimer's Institute  
**HEALTH** 4001 E. Fletcher Avenue  
Tampa, FL 33613-4808  
(813) 396-0606  
[alz.health.usf.edu](http://alz.health.usf.edu)

## When brains go bad.

USF neuroscientist Dr. David Kang believes new insights into the brain's molecular pathways will help researchers like himself find ways to prevent or cure Alzheimer's disease.

**P**icture yourself on a sunny beach. Easy enough. But what exactly did our brains have to do to accomplish that?

Few of us give any thought to what's going on inside our brains when we think. But that's how Dr. David Kang spends much of his time in his quest to get to the underlying causes of - and potential cures for - memory impairment.

He is fascinated not only with how the brain works, but especially with how brain cells fail in Alzheimer's patients and others.

The 41-year-old neuroscientist and professor of molecular medicine at the USF Health Byrd Alzheimer's Institute in Tampa has dedicated his career to studying brain malfunction with the hope of one day developing a way to prevent or cure Alzheimer's disease, the

CONTINUED ON PAGE 4

David Kang, PhD

ALEX STAFFORD

## When brains go bad.

CONTINUED FROM PAGE 3

6th leading cause of death in the United States and one of the most perplexing to researchers.

"I think of myself as having two roles," says Kang, who came to the Byrd Institute a year ago after nearly 20 years as a brain researcher at the University of California, San Diego. "One of those roles is furthering the knowledge of how nerve cells function normally and how they dysfunction, because I'm ultimately interested in how the brain works."

He hopes his other role will be in advancing medical science in treating memory loss.

"You have to understand that medical science doesn't work on the basis that there's no cure today and tomorrow there is a cure," he says. "It doesn't work that way. It's incremental."

"Right now, there is no cure for Alzheimer's disease, and the drugs that are available today are drugs that don't target

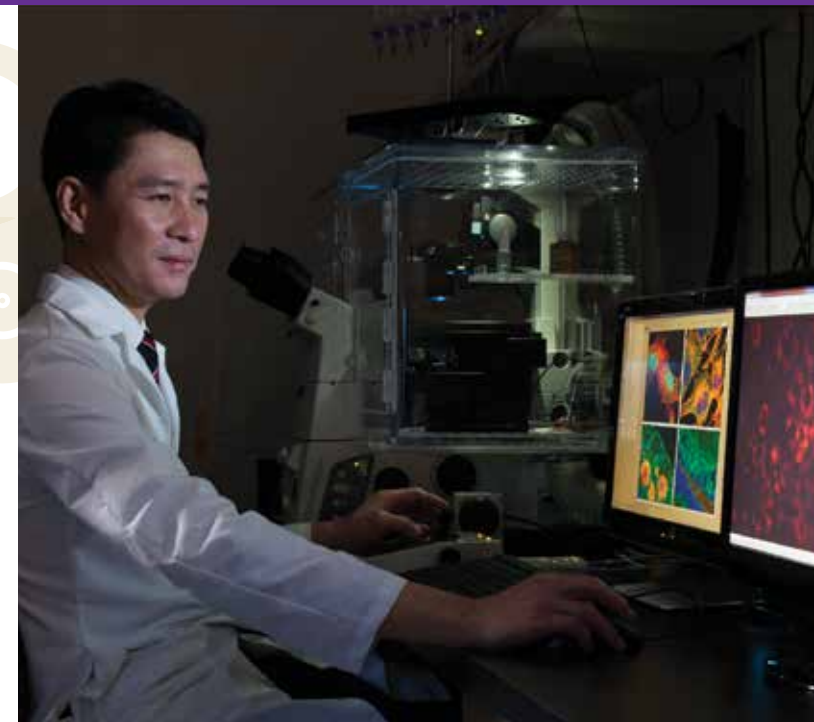
the real cause of the disease," Kang explains. "It's sort of like taking cold medicines for the flu because they mask some of the symptoms for a while, but they don't treat the underlying causes."

"My goal is that through my research (which is very unique compared to what other people are working on), if we're able to find targets [in the brain] as well as therapeutic drugs that work on those targets, we will be able to contribute to curing Alzheimer's disease in an incremental fashion."

He is optimistic that the first wave of drugs to address the cause of the disease, rather than simply treat its symptoms, could be available within five years.

### Studying the brain's nerve cells

Kang is currently investigating what causes a brain's molecular pathways to break down.



Dr. David Kang studies nerve function and malfunction in living cells with the aid of an imaging fluorescent microscope that is also temperature-controlled to keep the cells alive while they are being analyzed. Dyes and other techniques are used to highlight different properties and processes within the cells.

Scientists believe that a gooey substance, known as amyloid plaque, that accumulates in the brains of people with memory impairment derails the molecular pathways and can be highly toxic to nerve cells. Kang is looking into what triggers the plaque buildup and how to prevent it.

One of those triggers may be a protein known as RanBP9 that he discovered in 2009 as part of his NIH-funded research. Elevated levels of RanBP9 in laboratory mice produced more harmful plaques in their brains. Similarly, decreasing RanBP9 reduced the amount of amyloid plaque.

Kang, a cell biologist who is also an associate professor in USF Health's Department of Molecular Medicine, hopes he's on the right path to developing new medicines that would prevent amyloid plaque formation as well as block its toxic properties.

In recent years, Kang received an Independent Scientist Award grant from the National Institutes of Health to help him advance his investigative techniques, including sophisticated microscopy, for his current and future research projects.

### Catching it in the early stages

As with most diseases, Kang believes that the best chance of overcoming memory impairment is to identify and treat the condition early on.

"At the early stage, I think it's fully reversible," he says, "but I think the first step would be to slow it down or stop it."

"I think that in the next five years, we'll probably have some form of drugs available that don't just mask the symptoms, but will at least try to get at the cause of Alzheimer's - and will have an incremental role in preventing Alzheimer's disease."

But don't expect any overnight miracles, he adds.

"Just because a new drug comes out, it's not going to cure Alzheimer's disease right away," he cautions. "It's probably going to take second-generation, third-generation, fourth- and fifth-generation drugs, and possibly a combination of drugs to actually target Alzheimer's disease."

"So, it's a long process. We know that for sure. I hope that our work is unique and that the drug that we come up with will be able to target a unique aspect of Alzheimer's that will ultimately prevent or cure the disease." ■

Bolstered by a five-year, \$1.5 million research grant from the National Institutes of Health, he's looking at how individual nerve cells communicate with each other through chemicals known as neurotransmitters. Even more important is the accumulation of certain substances in the brain that not only impede the nerve cells from communicating, but can also kill them.

Kang points out that in a healthy brain there are roughly

**"Right now, there is no cure for Alzheimer's disease, and the drugs that are available today are drugs that don't target the real cause of the disease. It's sort of like taking cold medicines for the flu because they mask some of the symptoms for a while, but they don't treat the underlying causes."**

David Kang, PhD

100 billion nerve cells, and each one has approximately 1,000 connections, making for 1 trillion or more nerve pathways in the brain. Losing the use of just one-third of those nerve cells can result in advanced stages of Alzheimer's, he says.



ALEX STAFFORD

# Promising Innovations: A community-based approach to screening for memory loss.



L-R: Eileen Poiley, director of education, Byrd Alzheimer's Institute, meets with Rosa Cambridge, Richedean Hills-Ackbar and Evangeline Best of the Tampa Bay chapter of the National Black Nurses Association.

ALEX STAFFORD

A Byrd Alzheimer's Institute initiative to provide free memory screenings to older African-Americans in their Tampa neighborhood is poised to become a nationwide model.

**F**act: An estimated 5.4 million Americans have Alzheimer's disease, and that number is expected to triple in the next 40 years as more baby boomers age and face a longer life expectancy than previous generations. Fact: Older African-Americans are twice as likely as older whites to develop Alzheimer's and other dementias. They also tend to be diagnosed at a later stage than others, delaying treatment and services currently available to them and their families.

When the USF Health Byrd Alzheimer's Institute in Tampa heard about an opportunity to help seniors in one of Tampa's oldest and predominantly African-American neighborhoods, they jumped at the chance.

And it paid off. From more than 450 grant proposals nationwide, the philanthropic Kendal Charitable Funds chose the Institute's proposal to receive the first Promising Innovations Grant awarded by the organization. The \$25,000 grant will enable the Byrd Institute to offer free memory screenings, an explanation of the screenings, and education about the risk factors for dementia to more than 400 primarily African-American seniors in their medically underserved East Tampa neighborhood, where there are no hospitals and few medical resources, especially specialists, nearby.

"We felt that developing a program to increase early detection and screening would be extremely beneficial to this community, because African-Americans tend to have a higher rate of getting Alzheimer's and other dementias, and they tend to be diagnosed at a later stage," said Eileen Poiley, director of education at the Byrd Institute.

Although researchers have yet to find a cure for Alzheimer's, early detection and intervention can improve a

patient's quality of life and give them early access to medical care and support services. Based on its innovative pilot project, the Byrd Institute plans to develop a model that can be used in underserved minority communities nationwide - a factor that impressed the Kendal foundation's selection committee.

"This is an innovative approach to a very substantial issue in an aging population," Bruce Stewart, chairman of the Pennsylvania-based Kendal Charitable Funds, said in a prepared statement. "This project also has the potential to be replicated to serve minority communities across America."

**"Wherever there's a need where there are underserved and disadvantaged, we try to make things accessible and affordable and try to be as accountable to the community as we can be as health care providers."**

Rosa McKinzy Cambridge, RN, BSA, CM  
President, Tampa Bay Black Nurses Association

## National Black Nurses Association plays a key role

The Byrd Institute decided that for the program to be successful, it should be conducted in the same neighborhood as the seniors they hoped to reach, to make it easily accessible. And to allow the community to feel comfortable participating in the memory screenings, they would enlist the help of medical pro-

fessionals who already had the trust and respect of the local residents.

So the organizers adapted an approach that worked well for them last year in The Villages, a retirement community near Ocala, where they enlisted the help of retired nurses to provide memory screenings to more than 800 residents.

Based on their target audience in East Tampa, a densely-populated community where more than four out of five residents are African-American and nearly one-third of all residents are over the age of 50, the Byrd Institute reached out to the Tampa Bay chapter of the National Black Nurses Association and found an eager partner.

## Promising Innovations

CONTINUED FROM PAGE 7



The H.O.P.E. (Helping Our People Excel) Learning Center provides a variety of education and health services in its East Tampa neighborhood, and it serves as “ground zero” for this innovative program.

“Wherever there’s a need where there are underserved and disadvantaged, we try to make things accessible and affordable, and try to be as accountable to the community as we can be as health care providers,” said Rosa McKinzy Cambridge, president of the Tampa Bay chapter. Cambridge, along with chapter members Evangeline Best and Richelean Hills-Ackbar, will work closely with Poiley to implement screenings at targeted locations in East Tampa.

“Any time we can empower the African-American community especially, and the general community at large, it’s part of our mission to make them aware of advances in medicine and provide them with access to information and resources they may not be aware of,” Cambridge added. Cambridge retired after nearly 40 years of nursing in the Tampa Bay area, where she raised her five daughters and now enjoys her 13 grandchildren.

Poiley is pleased that so many of the professionals in the Back Nurses Association volunteered to get trained to conduct the one-on-one screenings.

“It’s nice to have the opportunity to go into a community to provide a service, rather than always expecting those residents to come to us,” she said. “So to be able to do something community-based and to work with such a respected group within that community is a very good collaborative opportunity for us.”

### Identifying those at risk

Organizers plan to conduct the screenings at popular gathering spots for seniors in East Tampa, such as the community centers and churches, to appeal to those who may be reluctant to undergo the screening assessment.

The screening tests several types of cognitive abilities, including memory, executive function, language, orientation and visuospatial skills. Participants also fill out a health survey, so the screeners can discuss with them their health risks for developing Alzheimer’s or other memory problems. Those who show signs of memory loss will be

**“It’s nice to have the opportunity to go into a community to provide a service rather than always expect those residents to come to us.”**

*Eileen Poiley, MS  
Director of Education, USF Health Byrd Alzheimer’s Institute*

encouraged to see their primary care physician, or they may be referred to the Center for Memory C.A.R.E. at the Byrd Institute for a more thorough evaluation.

“A lot of people get their blood pressure screened and many get their cholesterol screened, but I don’t think a lot of seniors realize the value of a memory screening,” Poiley said. “Not all memory problems are Alzheimer’s, and some conditions that cause memory loss can be treated or improved with proper care. Even if it is Alzheimer’s, the sooner they get the appropriate intervention, the better,” said Amanda Smith, MD, medical director at the Byrd Institute and consulting physician to the Kendal grant.

An added bonus to the outreach program is that some seniors will find it comforting to learn that their occasional forgetfulness is normal as they age.

Cambridge sees the program as an excellent opportunity to empower individuals to take charge of their health, including their mental health, and to make them aware of the resources available to them and their families, especially caregivers who play a key role in a loved one’s illness.

### Developing a national model in Tampa

Once the screenings are completed this summer, the Byrd Institute will develop a comprehensive guide to help other cities conduct a similar program with elderly minorities in underserved communities throughout the country. The National Black Nurses Association, with 83 chapters in 34 states and more than 150,000 active and retired African-American nurses and nursing students, is expected to play a pivotal role in helping the pilot program in East Tampa go national.

A Memory Screening Program Guide will be produced by the Byrd Institute and distributed to the National Black Nurses Association to make it available to the individual chapters nationwide. The guide will have all the forms, handouts, promotional material, and training information necessary for other groups to replicate the project.

Jessica Banko, PhD, associate director at the Byrd Institute and principal investigator of the Kendal grant, sees another important advantage to their work in East Tampa and the prospects for the project being replicated nationwide. “African-Americans are often under-represented in Alzheimer’s disease research and clinical trials,” she noted. “We will provide information about research opportunities and the benefits of participating in clinical studies.”

Cambridge calls the East Tampa initiative “very, very exciting.”

“It will be a marvelous thing, once the pilot is done and they’re able to expand it to other areas,” she said. ■

## Benefits of a memory screening



Most older adults know the benefits of medical screenings and get their blood pressure and cholesterol checked on a regular basis. But how many older adults are aware of the benefit of having their memory screened as well?

A memory screening takes approximately 30 minutes. It is not a diagnostic tool, but it can determine if a person has a problem with his or her memory and should seek further evaluation by a specialist.

For some, the screening may ease their concerns and reassure them that their memory is fine. But for those individuals who do have a memory problem, the results may encourage them to seek a doctor.

Early detection of memory problems is very important. There are other medical conditions that cause memory loss and have symptoms similar to Alzheimer’s. Depression, alcoholism, anemia, diabetes, sleep apnea, thyroid imbalance, vitamin deficiencies, medication side effects and acute infections can cause memory loss. If a person has one of these conditions, his or her memory loss could possibly be reversed following proper medical treatment.

If the memory loss is due to Alzheimer’s disease, then the sooner the diagnosis is made, the better. Although there is no cure, treatments are available to preserve function and slow the progression of the disease. The sooner people with Alzheimer’s receive medication, the longer they continue to enjoy a higher quality of life.

If you know individuals who are concerned about their memory and who notice changes in their memory, encourage them to have a memory screening.

*Amanda G. Smith, MD  
Medical Director, USF Health Byrd Alzheimer’s Institute*

## Q & A with Robert A. Hauser, MD, MBA

Dr. Robert A. Hauser is a man of many talents. The University of South Florida neurology professor and authority on Parkinson's disease and movement disorders lectures worldwide on these subjects. He has also served as director of the USF Health Parkinson's Disease and Movement Disorders Center since 1994. The center – one of only 43 National Parkinson's Disease Foundation Centers of Excellence worldwide – relocated its operations last year from Tampa General Hospital's campus to the USF Health Byrd Alzheimer's Institute in Tampa. Dr. Hauser is the lead investigator for several national and international trials of experimental drugs aiming to prevent or cure Parkinson's, a degenerative brain disorder affecting millions of people worldwide, including actor Michael J. Fox. In a report on the nation's top doctors, *U.S. News & World Report* named Dr. Hauser as one of the 10 leading neurologists in Florida.



Photos by Eric Youngmans, USF Health Communications

**Q:** At first glance, Parkinson's disease and Alzheimer's disease don't seem to have much in common, but in reality they do. In what ways do the movement disorders in Parkinson's patients and the memory disorders in Alzheimer's patients overlap?

**A:** There is both clinical and pathologic overlap between Parkinson's and Alzheimer's. Clinically, we find that many patients with Parkinson's develop thinking and memory difficulties similar to those in Alzheimer's, and conversely, many patients with Alzheimer's develop slowness of movement similar to that of Parkinson's. On examination of the brain in individuals with Parkinson's, one commonly sees Alzheimer's pathology superimposed on Parkinson's pathology. Perhaps most importantly, both of these diseases seem to have at their core the presence of abnormal protein [in the brain]. Learning how to stop or slow the progression of one of these diseases is very likely to teach us a lot about how to stop or slow the progression of the other.

**Q:** What are the benefits of having the Parkinson's Disease and Movement Disorders Center located at the Byrd Institute?

**A:** By being located at the Byrd Institute, we hope to be able to have our Parkinson's patients avail themselves of the fantastic clinical services offered by the Alzheimer's team, including evaluation and management of cognitive impairment, psychological services, and geriatric medical care. We also expect that as more effective treatments are developed for Alzheimer's, we will want to investigate their usefulness in Parkinson's, perhaps to improve thinking and memory, or perhaps to slow progression of the disease. Also, people with Parkinson's have a much higher risk of dementia than the general population.

**Q:** What are some of the roles of the Parkinson's Disease and Movement Disorders Center?

**A:** At the Parkinson's Disease and Movement Disorders Center, we provide expert evaluation and management of conditions such as Parkinson's disease, tremor, and dystonia. In addition, we perform many clinical trials. We are very focused on evaluating new therapies to ultimately bring better outcomes to our patients.

**Q:** What is currently available in terms of preventing Parkinson's disease, slowing its progression or reversing its symptoms?

**A:** The motor symptoms of Parkinson's (slowness, stiffness, and tremor) are caused by a loss of dopamine neurons in the brain. Currently available medications replace lost dopamine and provide good benefit for symptoms for about 5 to 7 years. However, there are currently no proven therapies to slow progression of the disease. Between 5 and 10 years, almost all patients are on the most effective medication, levodopa, but they find that it only lasts a few hours and then wears off, and many patients develop a sensitivity to it such that they experience twisting/turning movements called dyskinesia. After 10 to 12 years, many patients experience worsening balance and cognitive impairment. Thus, much of our research is focused on how we can slow the disease to improve the long-term outcome.

**Q:** What gives you optimism about the future for understanding and treating Parkinson's disease?

**A:** Great optimism comes from the fact that we now know a few gene mutations that can cause Parkinson's. Even though they only account for a small percentage of all Parkinson's cases, they should be very helpful in creating reliable animal models that can then be used for testing new therapies, to identify those that might slow or stop progression. In addition, we now believe that misfolding and abnormal aggregation of a protein called alpha-synuclein plays a central role in the pathology of Parkinson's, and therapies that can mitigate this process are being developed.

**Q:** What's one thing you'd like to emphasize about the work you do?

**A:** The goal of clinical research is to work with patients to evaluate promising new therapies. Scientists and physicians can't do it alone. Patients need to get involved to help us develop better treatments for themselves and others. ■

# From Caregiver To Compassionate Crusader.

Betsy McDargh reaches out to help others understand and cope with Lewy body dementia after dealing with her husband's unpredictable illness.

**F**or a while, when Betsy McDargh mentioned that her husband of more than 30 years was acting in odd ways, friends and family thought she was crazy. They only saw the successful developer and businessman between his bizarre episodes.

Despite his moments of confusion and disorientation, and fleeting delusions or hallucinations, doctors who examined Jack ruled out Alzheimer's disease.

"My husband and I had a great relationship and shared everything, and suddenly he was becoming someone I didn't know," the owner of a Tampa commercial real estate consulting firm recalled.

After a few years of increasingly puzzling behavior and countless Internet searches, Betsy honed in on one form of dementia, about the same time her husband's doctors did: Lewy body dementia (named for German scientist Friedrich Lewy and the abnormal deposits, or bodies of protein, he found in the brain in the early 1900s that disrupted normal brain function).

Betsy McDargh calls the diagnosis "a life-changing experience" for them.

She increasingly took on more responsibility for Jack's care and running their household. "Any relationship to life's responsibilities - income, finances, insurance - just left him. The weight of all that became mine, as well as the increasing need for his personal care," she said. "The weight of this disease is enormous, because the patient's days are so unpredictable and so challenging."

Even before Jack died in August 2011 at the age of 85, eight years into his illness, Betsy had spoken to staff members

at USF Health Byrd Alzheimer's Institute in Tampa about helping other families deal with the disease.

She became the catalyst in creating Tampa Bay Lewy Body Caregivers Support Group, the only one in central Florida and one of a handful in Florida.

"I feel like this is the end of our walk through this process, and now I have the opportunity to help others a little from what we experienced," said the 66-year-old Carrollwood resident.

McDargh helps families learn to deal with different stages of the disease and its toll on loved ones at meetings on the second Monday of each month at 3 p.m. at the Byrd Institute.

Her goals for the group are to share and discuss coping strategies, provide caregivers with medical and educational resources, and support caregivers in a friendly and casual setting.

Nancy Teten, director of social work services at the Byrd Institute, praises McDargh's initiative and commitment.

"Betsy wanted to make a difference for other Lewy body dementia caregivers and to provide them help, hope and information," said Teten, a licensed clinical social worker who responds to clinical questions that come up during the meetings. "She received professional training from the Lewy Body Dementia Association and has personal experience and training from caring for Jack."

McDargh has been "instrumental," Teten said, in providing doctors, health care workers, lawyers, dementia-care facilities and caregivers, primarily in the Tampa Bay area, with information to help them better recognize symptoms

CONTINUED ON PAGE 16

**"I feel like this is the end of our walk through this process, and now I have this opportunity to help others a little from what we experienced."**

Betsy McDargh



Jack McDargh

## What Is Lewy Body Dementia?

**It is one of the leading causes of dementia, and it affects more than 1.3 million Americans and their families.**

The Lewy Body Dementia Association describes it as an umbrella term for a form of dementia with three common behavioral symptoms:

- Some individuals will start out with a memory or cognitive disorder that may resemble Alzheimer's disease, but over time, two or more distinctive features become apparent leading to the diagnosis of "dementia with Lewy bodies." Symptoms that differentiate it from Alzheimer's include: unpredictable levels of cognitive ability, attention or alertness; changes in walking or movement; visual hallucinations; a sleep disorder in which people physically act out their dreams; and severe sensitivity to medications for hallucinations.
- Others will start out with a movement disorder leading to the diagnosis of Parkinson's disease and later develop dementia and other symptoms common in Lewy body dementia.
- Lastly, a small group will initially exhibit neuropsychiatric symptoms that can include hallucinations, behavioral problems and difficulty with complex mental activities, leading to a diagnosis of Lewy body dementia.

**For more information, visit the Lewy Body Dementia Association's Web site at [lbda.org](http://lbda.org).**

# Photographic Memories.

Tampa native Pat Bunch finds comfort in joining the fight against the disease that claimed her high school sweetheart and partner-in-life for 51 years.



Photo by Shockleyphoto.com

Pat Bunch still vividly recalls a doctor's remark to her many years ago while he was treating her husband for Alzheimer's disease.

"He said to me, as the caregiver, 'Most people either never want to hear the word Alzheimer's again, or will continue to take an interest in it' – and I've never forgotten that," said the Carrollwood resident. Little did she realize that those few words more than a decade ago would help shape her life since then.

Today, the retired photography shop owner gives her time and money to help support the fight against Alzheimer's and its lingering social stigma. One of her concerns is that families navigating the day-to-day challenges of dealing with a loved one's dementia often feel increasingly isolated, making their lives even more stressful.

Bunch hopes to ease their burden by lending her support.

At the USF Health Byrd Alzheimer's Institute, not far from where she grew up in Tampa and where her husband took part in clinical trials for his disease, Bunch financially supports its scientific research and donates her time to help out with special events, including National Memory Screening Day last fall.

"I've had many opportunities to talk to people who were experiencing the disease," she said. "I want people to say to themselves, 'She survived, so probably I can, too.' Unfortunately, I still see a stig-

ma attached to the disease, and some people just don't want to talk about it."

## Empowered by her personal journey

Bunch and her husband, Ray, both Tampa natives, were high school sweethearts at Hillsborough High who wed a few years later in 1951.

They founded and operated North Tampa Photography together while raising four children.

Ray Bunch was in his late 60s when his wife first noticed some personality changes. He occasionally became disoriented in familiar settings, and his usual gentle manner with their employees sometimes took on an uncharacteristically harsh tone, she said.

Dr. Eric Pfeiffer, founder of the Suncoast Alzheimer's and Gerontology Center at the University of South

Florida (which later relocated to the Byrd Alzheimer's Institute), not only diagnosed Ray's condition, but also uttered those fateful words that shaped Pat Bunch's life.

She describes the five-year journey with her husband's disease, before his death in 2002 at the age of 72, as "an education like no other."

Rather than leave the past behind, she continues to help spread awareness of dealing with the disease and to encourage others to overcome feelings of isolation they often experience.

"I feel good that I'm doing something for somebody else," she said, "and I'd like to see other people who have the time and the means to do something they feel is important, too."

She also hopes that former President Ronald Reagan's and country singer Glen Campbell's public battles with

Alzheimer's will promote scientific research and greater compassion, understanding and support for families coping with the disease.

## Admirers praise her commitment

Holly Lisle, director of development at the Byrd Institute, praises the many ways Bunch has chosen to show her support.

"The more people we have like Pat, the more our message gets out to help raise not only financial revenues, but also human resources," she said.

Julie Gillespie, an assistant vice president with USF's Office of Development, echoes Lisle's sentiments.

"It's very special to have someone like Pat who was born and raised here

**"I've had many opportunities to talk to people who were experiencing the disease. I want people to say to themselves, 'She survived, so probably I can, too.'"**

Pat Bunch

and who loves this community and this university and has made such a complete commitment to support and help them to become better," she said. "To see so many of our friends support our institution over the years is a testament to their desire to make a difference in the lives of others."

Pat Bunch sums up what she has learned firsthand quite succinctly: "There is joy in giving." ■

## How To Give

The USF Foundation welcomes gifts of all sizes on behalf of the Institute. Outright gifts and planned gifts can benefit both the university and the donor, via potential tax benefits.

## Outright gifts

Outright gifts are the simplest way to help, and immediately go to work on behalf of the university. Donors can make checks payable to the USF Foundation. The donor can designate the gift for Alzheimer's by a note in the memo line of the check or in a letter, and may designate the gift for a specific department or program.

Donations can be mailed to:  
University of South Florida  
ATTN: Development Department  
12901 Bruce B. Downs Blvd., MDC 70  
Tampa, FL 33612-4742

Donations also can be made online, using a credit or debit card. Visit the Web site at [giving.usf.edu](http://giving.usf.edu) and click the **Make A Donation** link. Many corporations will match gifts made by employees, retirees or even spouses, allowing the donor to double or triple the value of their gift. It only requires the donor to request a matching gift form and send it along with the gift.

## Planned giving

Planned giving involves donating assets and is usually part of a donor's estate plan. Options include simple bequests, memorial and honorary gifts, endowed gifts, charitable gift annuities and charitable remainder trusts. Such gifts usually involve legal documents and require the advice and assistance of a professional financial consultant. The USF Foundation offers more information at its Web site.

## Corporate & foundation giving

Donating to USF can also benefit corporations and foundations. Through corporate giving, businesses can build partnerships, participate on USF advisory boards, and develop relationships with outstanding students who are preparing to enter the workforce. Foundations can fulfill their missions by working with USF to find projects and goals that meet or align with their funding initiatives. The USF Foundation has staff trained in coordinating these gifts and developing opportunities that help both the university and the donor organization. For more information, please contact Holly Lisle, director of development, at (813) 974-0890 or email her at [hlisle@health.usf.edu](mailto:hlisle@health.usf.edu). ■



## From caregiver to compassionate crusader.

CONTINUED FROM PAGE 12

and to help patients and their families access resources.

By meeting at the Byrd Institute, families learn about the availability of the Institute's resources for diagnosing and treating various forms of dementia and for empowering caregivers.

McDargh hopes medical professionals throughout Florida will encourage families of Lewy body dementia patients to attend support groups, which are also available in Sebring and Jacksonville, and to encourage families to help establish new groups. Families in communities that don't have a support group could benefit from an Alzheimer's support group, because both forms of dementia bring many of the same challenges.

McDargh wants people to contact her if she can be of assistance, by emailing her at [tampabaylewybodycaregivers@gmail.com](mailto:tampabaylewybodycaregivers@gmail.com).

Teten is grateful for McDargh's volunteer efforts. "As a clinician and caregiver myself, I believe in her abilities to help others and to continue to facilitate such an important support group," she said. "She is a staunch advocate for identifying, treating and managing the challenging cognitive, motor and behavioral symptoms of Lewy body dementia." ■

## Making A Difference In Our Communities

The Byrd Institute participates in community outreach activities to connect with audiences and caregivers who may be affected by Alzheimer's disease and related memory disorders. Through these events, the Byrd Institute is able to share information on the warning signs of Alzheimer's disease as well as on support services offered at the Institute.

According to the National Alliance for Caregiving, more than 65 million people, 29 percent of the U.S. population, provide care for a chronically ill, disabled or aged family member or friend. Education and outreach targeted to family caregivers and/or health professionals is an integral part of the Byrd Institute mission. The staff participates in health fairs, expos, conferences and seminars throughout the greater Tampa Bay area, and delivers off-site presentations (upon request) at local churches, civic organizations and private groups.

Information on upcoming community outreach activities is available online on the Byrd Institute Web site at [alz.health.usf.edu](http://alz.health.usf.edu).



The Byrd Institute was a proud sponsor of the 2013 Alzheimer's Family Support Walk in The Villages, FL, organized by the Alzheimer's Family Organization, a non-profit charitable organization dedicated to assisting caregivers and families affected by Alzheimer's disease or related disorders.



The Byrd Institute has been a proud partner of Memory Screening Day since 2004. Each November, during National Alzheimer's Awareness Month, the Institute hosts the Alzheimer's Foundation of America's National Memory Screening Day, when clinicians offer free memory screenings to the community, including medication reviews and other health screenings. Guests of National Memory Screening Day (above) complete registration forms.



Participants of the Byrd Institute Cure Run 2013 pose prior to the Gasparilla Distance Classic marathon in Tampa. The Cure Run is an annual fundraiser founded by Dennis Akers (kneeling), development committee member at the Byrd Institute, to raise awareness of Alzheimer's disease.



Byrd Institute Associate Director Jessica Banko, PhD, speaks at the 2013 Tampa Bay Trust Company Women's Educational Series on 'Alzheimer's Treatments and Resources' with Institute Medical Director Amanda Smith, MD (not pictured).