

Research Register

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where hope begins

Friends and Family Unite to Honor "Golden" Research Couple

It's pretty common to throw a party for a golden anniversary celebration. University Memory and Aging Center (UMAC) participants Dan and Margy Becker's five offspring outdid themselves recently by honoring their parents in an extremely thoughtful and meaningful way. The festivities last August featured a philanthropic gift aimed at a future without Alzheimer's disease (AD).

Kim, Kandace, Kelly, Kate and Daniel requested two things of family and friends in their party invitation. First, they wanted photographs for a commemorative album of Dan and Margy's life together. Then, they urged guests "to join us in our efforts to enhance research efforts around AD. In honor of our parents, we have created the Dan and Margy Becker Fund at University Hospitals of Cleveland."

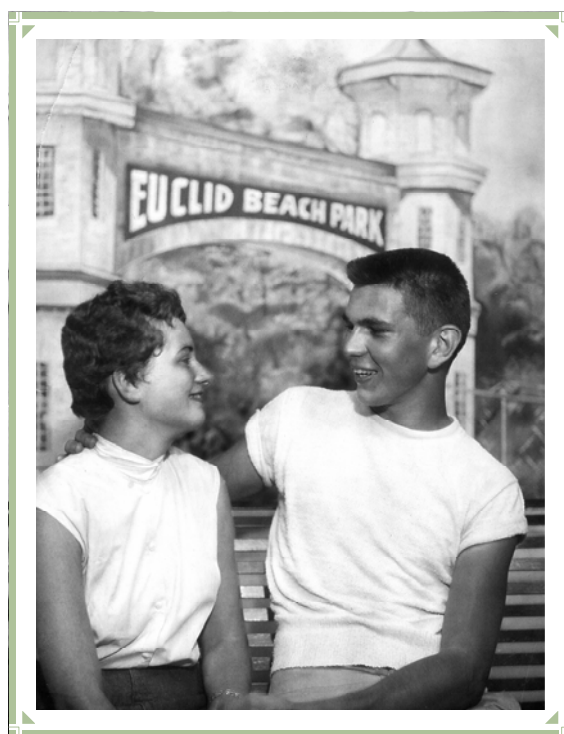
Even the number of contributors was "golden." As of press time, 54 friends and family had contributed \$7,175. "We were overwhelmed with the response and the generosity," said Dan Becker.

Dr. Karl Herrup, UMAC Director, reflected on the impact of the combined donation. "Each year there are good new ideas that must stay on the drawing boards because we lack the funds to make them happen. Gifts like this one make all the difference," he said.

"As steward of these funds, I can assure you that I will always ask that each dollar spent somehow act as a catalyst for something more, something bigger. To me, each one is an expression of hope and a statement of determination that this will be the generation that sees an end to AD and the suffering that it causes."

The Beckers joined the research program in 2003. "Participating in the UMAC research program has been a wonderful experience," Dan Becker said. "We, of course, hope against hope that something is going to be found for a cure. We want to contribute to that by being involved."

If you would like to make a donation, please call 216.844.6412, email william.ditirro@uhhs.com or complete the form on page six.



In earlier days, the Beckers enjoy their second date at the former Euclid Beach Amusement Park near Cleveland.

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The University Memory and Aging Center is an interdisciplinary center based at University Hospitals of Cleveland, Case School of Medicine and the Case Research Institute.

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Dr. Alan Lerner Rejoins University Memory and Aging Center

It is with pleasure that we welcome Dr. Alan Lerner back to UMAC. On September 1, Dr. Lerner assumed the duties of Clinical Core Leader of the Alzheimer's Disease Center Grant, as well as the Medical Director of Neurology Service at UMAC. He takes over these responsibilities from Dr. Alexander Auchus, who will be devoting more of his energies to our drug trials program, which has been expanding considerably under his direction.

Dr. Lerner received his bachelor's degree from Cornell University and an M.D. from Cornell Medical College. He has trained in Geriatric Neurology at the Case Western Reserve University School of Medicine and University Hospitals of Cleveland. In these early years, he was closely affiliated with the research program of Dr. Robert Friedland, a collaborator with whom he has authored a number of scholarly research papers dealing with dementia and AD. After his fellowship, the faculty of the Neurology Department was so impressed with his abilities that they asked him to join the faculty in 1994. He did and soon reached the rank of Associate Professor. The Department and the Hospital then demonstrated their confidence in his skills and leadership ability by appointing him as Chief of Neurology at Heather Hill Health Care Center, a University Hospitals facility in Chardon. In 2003, he advanced to Chief of Staff at Heather Hill.

For Dr. Lerner, returning to Fairhill Center and UMAC is a bit of history repeating itself. Or as Yogi Berra used to say, "It's déjà vu all over again." While it is true that he has remained in touch during his years away, his responsibilities at Heather Hill kept him too busy to spend much

'quality time' with his former collaborators and colleagues. Now we're delighted to have him back and seated in the Clinical Director's chair. He brings a fresh energy and sense of newness to the Center as he reconnects with the activities here, and this is wonderful for us. But he also brings with him a deep familiarity with the Center and a great appreciation for the way things work – in the clinic and in research alike. His learning curve will be short. As Director, I feel fortunate indeed to work with someone of Dr. Lerner's talents and enthusiasm.

So, on your next visit to UMAC, if you see a tall bearded gentleman striding purposefully to his next appointment, take a minute to stop him and say, "Welcome back, Dr. Lerner!"

Karl Herrup, Ph.D., Director



Dr. Alan Lerner (left) greets a research volunteer.

We invite healthy volunteers age 65 years and older to participate in a three-month study evaluating the effects of an FDA-approved medication on thinking and emotions.

Please call 216.844.3100 for qualifying information.

Compensation will be provided.

Research on Caregiving and Nursing Home Use

Over the years, hundreds of caregivers of persons with AD have joined our research registry. Their responses to our questions about the experiences of caregiving and how they deal with them have helped us to learn a great deal. A few of our most recent findings are summarized below.

Research has shown that, in general, persons with dementia tend to benefit from being in their home environment. Our research supports this conclusion. However, that does not mean that a person with dementia should never be placed in a nursing home. In part, it is a matter of timing. We have found that when a person with Alzheimer's is relocated to a nursing home late in his or her illness, there is little if any negative effect on the person's health and longevity. This finding may be of help to caregivers who are evaluating whether or not it is time to begin sharing the care of their family member with a nursing home.

Some of the factors that lead to earlier nursing home placement, including the degree of memory loss, behavioral problems like agitation and wandering, and inability to carry out many of the activities of daily living, are out of the control of family caregivers to a great extent. There are, however, things the caregiver can do to extend the stay at home, including caring for themselves. We have found that regardless the type of care required, caregivers who manage to avoid feeling totally absorbed by their caregiving role are more likely to continue to provide care at home than those who feel that they have no life outside of caregiving. To us, this underscores the importance of making sure that family caregivers receive periodic breaks from their caregiving duties. For example, it supports the value of the *Substitute Caregiver Program* offered through the Cleveland Area Alzheimer's Association Chapter. This program helps primary family caregivers obtain short-term breaks from their caregiving responsibilities.

McKee McClendon, Ph.D.

Four Clinical Trials Need Volunteers

All of the research trials listed below are double-blind, randomized, placebo-controlled studies that require a study partner to provide information and attend all study visits. Each study will provide complete study-related physical exams, lab work, and cognitive evaluations at no charge.

Mild Cognitive Impairment (MCI)

This is a study to evaluate the safety and effectiveness of an oral, investigational medication for MCI. Participants must be 45-90 years of age and have mild memory loss. Contact Nicole Gunderson, Study Coordinator, at 216.844.6419.

CLASP (Cholesterol-Lowering Agent to Slow Progression of Alzheimer's Disease)

Cholesterol-lowering drugs or "statins" help to lower the risk of heart disease and may also be helpful in treating AD. Participants must be age 50 or better, have mild to moderate AD, and do not take or need a cholesterol-lowering drug. Contact Elaine Zioli, Study Coordinator, at 216.844.6328.

Valproate in Dementia

Valproate, an anticonvulsant drug, may be helpful in reducing the occurrence of problem behaviors in AD. This study will test whether Valproate is effective in delaying, weakening, or preventing difficult behaviors in people with early stage AD, and whether it has any effect on memory and thinking in AD. Participants must be 55-90 years of age, have mild to moderate AD, and have not experienced agitation or psychosis since the onset of AD. Contact Elaine Zioli, Study Coordinator, at 216.844.6328.

Antioxidant Biomarkers

Levels of chemicals in the blood and in cerebrospinal fluid will be measured to assess how well and safely different types of antioxidants can be used in persons with AD. This study will compare effects of different types of antioxidants to help select the best combinations of antioxidants in future, larger studies. Participants must be ages 60-85 and have mild to moderate AD. Contact Elaine Zioli, Study Coordinator, at 216.844.6328.

What's Next — Neuroimaging and Genetics Studies

Neuroimaging and genetics studies may hold the key to the prevention or cure for AD. Here are two such studies now seeking research volunteers at UMAC.

Alzheimer's Disease Neuroimaging Initiative

Participation in this landmark research study, sponsored by the National Institutes of Health, may help us learn how to stop the progression of MCI and AD in future generations. Information from this study might, in the future, lead to new treatments for AD. The goal is to determine whether imaging of the brain (through MRI and PET scans) every six months can help predict and monitor the onset and progression of AD. In addition to neuroimaging, the study will collect and test blood and, for some participants, cerebral spinal fluid, to determine if biomarkers can predict and monitor the disease. Testing cerebral spinal fluid is the only way to obtain important brain information.

UMAC researchers are seeking people in three groups. All must be in good general health, be between 55-90 years of age, and be fluent in English. One group must have a diagnosis of early AD. The second group must have memory problems.

The third group must have no memory problems (controls). Participants must be willing to undergo the test procedures. All participants must have a study partner who can come to all clinic visits or can answer questions over the phone. The study is taking place at 60 sites across the U.S. and Canada. Contact Sherye Sirrel, Study Coordinator, at 216.844.6416.

MIRAGE (Multi-institutional Research in Alzheimer's Disease Genetic Epidemiology)

This long-standing, federally-funded study evaluates the association between genetic (hereditary) and lifestyle (nonhereditary) risk factors for AD. Information from this study may speed the development of new diagnostic techniques and treatments for AD. Qualified families must include a living family member diagnosed with AD. The diagnosed person must have a living brother or sister who is willing to participate. Benefits include medical evaluation, if needed, and caregiver education, at no cost. Reimbursement for travel and parking is available. Compensation of \$100 is provided at the completion of the study. Contact Ellen Grady, Study Coordinator, at 216.844.6363.

Brain Donation: A Gift for Future Generations

Brain donation is one of the most important and generous gifts a family can give for the study of AD. It is an especially important part of our research program. More than 200 families already have participated in UMAC's Brain Donation Program. Still others plan to participate, and more are needed.

Our experience with many families has found that, combined with feedback that we provide, the process provides information that is useful in putting your loved one's disease in perspective. Brain donation can be done in a way that is consistent with honoring the dignity of your loved one.

Because of the tremendous stresses imposed upon the family at the end of a loved one's life, it is best to consider this process in advance. The best time is now, even though your loved one's death may be years away.

Individuals without memory problems are also part of our program. These donations allow us to compare those who do not have memory problems with those who do. Brain donations from those without memory problems are harder to obtain. Often, potential donors do not consider enrolling in a tissue donation program.

There is no cost to you or your family for participation in this program. We provide assistance with making necessary arrangements, and someone is always available to answer your questions.

As always, we welcome your participation. If you need more information or forms for enrolling in the Brain Donation Program, please contact Leon Hudson Jr., at 216.844.6411.

Brain donation can be done in a way that is consistent with honoring the dignity of your loved one.

Thank You

UMAC would like to thank our many friends and donors for their support in fighting AD. These private donations help fund the innovative health services and clinical and basic science research projects that support the Center's commitment to improving lives of people with AD and their families.

In Memory of Mary Bayman

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In Honor of Dan & Margy Becker's Golden Anniversary

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Ms. Kathleen Becker
Mrs. Myrtha Becker & family
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Mr. Paul Birch
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more per day might increase the rate of death from any cause. Definite conclusions or recommendations cannot be made based upon the data provided because a wide range of diseases were included in the analysis. For example, people who had good health, recent heart attacks, kidney failure, and AD were compared to each other.

Studies of this type do not prove a drug or vitamin supplement caused a specific problem. The role of studies like this is to provide information for additional research that is focused on a specific question. Consumers and health care professionals should base their health decisions on well-designed scientific evidence. People should consult their health care providers before stopping or starting to take vitamin E.

**UMAC's Memory Walk Team
Supports Alzheimer's Association**

Members of UMAC's team for the Alzheimer's Association 14th annual Memory Walk in October were delighted to raise \$850 in support of the Cleveland Chapter. UMAC and the Association are separate organizations; however, their missions overlap, and both are located in Fairhill Center.

**UMAC's *For Pete's Sake* Moves to
St. Louis**

For Pete's Sake, an educational play written by DaNine K. Ward and originally produced by UMAC as its 2003 New Play Festival winner, was performed at the University of Missouri - St. Louis in November. The event was to honor National Alzheimer's Disease Awareness Month.

Darlyne Redd, UMAC's Manager of Minority Outreach, created the New Play Festival and attended the St. Louis performance. *For Pete's Sake* is UMAC's second educational play to be shared with other cities. *Eighth Day of the Week*, an earlier play written by Prester Pickett, was greeted enthusiastically at performances in Ann Arbor, Pittsburg, St. Louis and San Diego.

Eating Fish Is Good for the Brain

A study in the December issue of the *Archives of Neurology* adds to the growing evidence that eating fish at least once a week is good for the brain. Study co-author Martha Clare Morris, an epidemiologist at Rush University Medical Center, said, "We found that people who ate one fish meal a week had a 10 percent slower annual decline in thinking. Those who ate two fish meals a week showed a 13 percent slower decline." The study was based on measuring how well 3,718 people, 65 and older, performed on simple tests, such as recalling details of a story. Fish that are rich in omega-3 fatty acids, such as salmon and tuna, are also helpful in preventing heart disease. Pregnant women should avoid certain types of fish with high levels of mercury, such as shark or swordfish.

Is Vitamin E Safe?

A study in *Annals of Internal Medicine*, January 2005, tried to link the use of vitamin E supplements with life-threatening complications. The study combined data from 19 studies that were published between 1996 and 2004. Results indicated that vitamin E doses of 400 units or

Study Links Teen IQ/Activity Level with Risk of Dementia

Your IQ and extracurricular interests as a teenager may forecast your memory and thinking abilities decades later. A study by UMAC researchers found that persons who were more active in high school and who had higher IQ scores were less likely to have mild memory and thinking problems and dementia as older adults. Results were published in *The Journal of the American Geriatrics Society* in July.

Said Thomas Fritsch, Ph.D., the study's lead author, "We found that, controlling for gender and education level, higher adolescent IQ and greater activity level were each independently associated with a lower risk for dementia and mild cognitive impairments. Conversely, those who were lower on the IQ continuum and who participated in fewer activities in high school had a higher risk of cognitive impairments."

Researchers used historical data from high school records and yearbooks from the mid-1940s to create a picture of the students' abilities and interests as teens. The research team reported on data collected from nearly 400 graduates. "The findings may help scientists in their efforts to understand the earliest roots of dementia," said Dr. Fritsch.

According to the research team, it is premature to make lifestyle recommendations to teenagers based only on a single study. However, Dr. Fritsch said, "It's a safe bet that being intellectually engaged, physically active and socially connected has many health benefits across the lifespan and is to be recommended."

"The findings may help scientists in their efforts to understand the earliest roots of dementia," said Dr. Fritsch.

Link Found Between Job Type and Alzheimer's Risk

People who held jobs that challenged them mentally during their working years may have a lower risk for AD, according to a study by UMAC researchers.

The researchers explored the employment history of 357 people over four decades, from their 20s through age 59. Of these, 122 people had AD, and 235 did not. All were over age 60 at the time of the study.

Results indicated that, even after taking education into account, people without AD were more likely to have held mentally challenging jobs. There are several possible reasons for the link between AD and occupations said the researchers.

"It could be that the disease has an early effect on a person's ability to get a mentally challenging occupation," said lead researcher Kathleen Smyth, Ph.D. "Or, it could be that higher levels of mental demands result in increased brain cell activity, which may help maintain a 'reserve' of brain cells that resists the effects of AD." Dr. Smyth added, "It is also possible that having a mentally demand-

ing job improves a person's ability to do well on the tests used to diagnose AD. If so, the disease may not be detected in such people until it is much farther along than in those whose jobs have lower mental demands."

A limitation of the study is that it did not control for socioeconomic status. Workers with higher socioeconomic status often hold jobs with higher mental demands. Therefore, variations in income, access to health care, better nutrition, and other factors related to socioeconomic status could be responsible in part for the findings. The study was published in *Neurology*.

Dr. Smyth added, "It is also possible that having a mentally demanding job improves a person's ability to do well on the tests used to diagnose AD."

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