KU Alzheimer & Memory Program NEWSLETTER

UPCOMING EVENTS

- Alzheimer & Memory Seminar Series (AMSS), 4:00-5:00 p.m., Landon Center on Aging, Room 200 (Last Tuesday of Each Month With Some Exceptions, Refreshments Provided)
  Tuesday, January 27, 2009:
  Jeff Burns, MD, "Exercise and fitness in early Alzheimer's disease"
  Tuesday, February 24, 2009:
  Wen Liu, PhD, "Motor and balance in Parkinson's disease"

- Alzheimer & Memory Program Caregiver Support Group, 2:00-3:30 p.m., Landon Center on Aging, Room 145 (Second Thursday of Each Month)
  Thursday, December 11th, 2008
  Thursday, January 10th, 2009
  Thursday, February 12th, 2008

- Down Syndrome Dementia Clinic (DSDC), afternoons, Landon Center on Aging Clinic (First Thursday of Each Month). To schedule an appointment, please call 913-588-6820
  Thursday, December 4th, 2008
  Thursday, January 3rd, 2009
  Thursday, February 5th, 2008

KU ALZHEIMER & MEMORY PROGRAM
The University of Kansas Medical Center

Contact Information

Phone: (913) 588-0555
Fax: (913) 588-5035
E-mail: plaubinger@kumc.edu

Visit Us Online!!!
www.kualzheimer.org

Department of Neurology
Mail Stop 1063
2100 W. 36th Avenue
Kansas City, KS 66160

KU ALZHEIMER & MEMORY PROGRAM
The University of Kansas Medical Center

Second Annual Research Participant Appreciation Breakfast

The KU Alzheimer and Memory Program hosted their second annual Research Participant Appreciation Breakfast on Saturday, October 11th, 2008. Participants and their guests made up a total of 95 attendees for the breakfast and presentations. Dr. Jeff Burns reviewed the progress of the KU Alzheimer and Memory Program, highlighting the Brain Aging Project. Dr. Heather Anderson, Robyn Honea, PhD, Dr. Russ Swerdlow, and George Thomas also presented findings from their research studies. Door prizes included two sets of KU glasses donated from the KU Medical Center Bookstore, a gift basket from Dean and Deluca, and a gift certificate from Voices in Time (www.ourvoicesintime.com). If you were not able to join us, we look forward to your doing so next year.

INSIDE THIS ISSUE:

In the Press: KU Alzheimer and Memory Program Receives National Attention

Recent research findings from the KUMC Alzheimer and Memory Program have received national attention. Results from the Brain Aging Project, a two-year longitudinal study assessing cardiorespiratory effects in Alzheimer's disease, were published in the September 15th issue of

Neurology. The article, "Cardiorespiratory Fitness and Brain Atrophy in Early Alzheimer's Disease," presented results suggesting that individuals with early AD who had higher fitness had less apparent brain shrinkage. These results suggest that regular exercise to maintain fitness may be a way to preserve brain functioning in the early stages of AD.

In a follow-up study, Robyn A. Honea, PhD presented more results from the Brain Aging Project

Continued on Page 2

KU ALZHEIMER & MEMORY PROGRAM
The University of Kansas Medical Center

Continued from Page 1

at the International Conference on Alzheimer's Disease (ICAD). Her findings note that higher fitness is associated with less brain shrinkage in areas of the brain that are most prominently affected by the disease (see article, "Physical Fitness Linked to Less Regional Brain Atrophy in Memory Areas in Alzheimer's Disease" on page 4).

These studies were recognized by a number of major news outlets including the Associated Press, Reuters, CNN, CBS Nightly News, and most recently on the front page of the Kansas City Star. We thought you should know that your time and effort for the Brain Aging Project is paying off!

Alzheimer and Memory Program Begins Second Anti-Amyloid Study

The KU Alzheimer and Memory Program has been selected to participate in a phase 3 clinical trial sponsored by Elan Pharmaceuticals. The study is investigating a new drug called Bapineuzimab, a novel therapy aimed at slowing Alzheimer's disease progression. The medication under investigation consists of an infusion of antibodies that target the amyloid protein, which accumulates in the brain of individuals with Alzheimer's disease. Study participants will receive six infusions of the investigational product or placebo over 65 weeks to examine whether the medication impacts the progression of Alzheimer's disease.

Eligible subjects must be:

1. age 50 to 85;
2. diagnosed with Alzheimer's disease;
3. on stable medications;
4. able to undergo MRI scans; and
5. be accompanied to every study visit by a study partner.

For more information, or to see if you qualify for the study, please call 913-588-0555.

Insulin Study Update

The Memory in Alzheimer's with Intranasal Insulin (MAIN) trial studies the effects of insulin on

memory processes using functional MRI. Insulin has been shown to improve memory performance, particularly in persons with early Alzheimer's disease, but the parts of the brain responsible for this effect were until recently unknown.

Preliminary results of this study were presented at the 2008 International Conference on Alzheimer's Disease in Chicago and suggest that the hippocampus is more active after insulin administration. The hippocampus is important in memory formation and is also one of the key structures affected early by Alzheimer's disease. Understanding how insulin affects this important structure may help unlock some of the mysteries underlying the changes in Alzheimer's disease. You may call George Thomas at 913-588-5322 (or email him at gthomas1@kumc.edu) if you would like to learn how to participate in this ground-breaking program.

This pilot study is supported through the Brain and Immuno-Imaging Grant Program of the Dana Foundation, a private philanthropic organization which supports research in brain science, immunology, and arts education. You can learn more at www.dana.org.

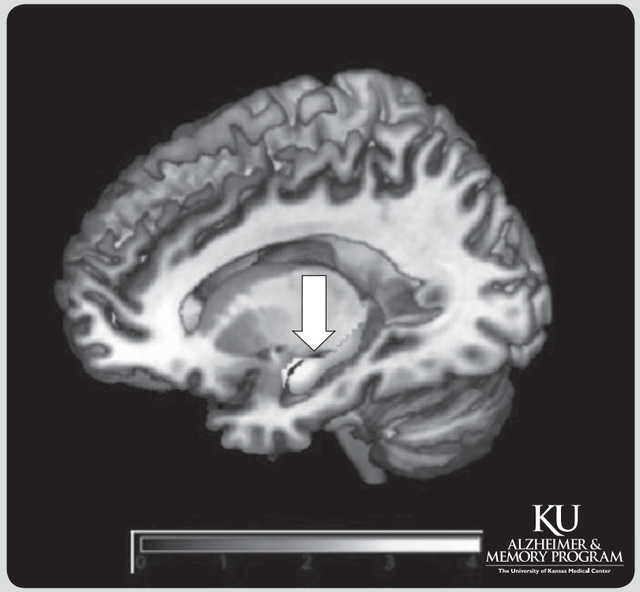
STUDIES AT A GLANCE

STUDY NAME	NUMBER ENROLLED	TARGET ENROLLMENT	CRITERIA	DESCRIPTION
Alzheimer's Disease Exercise Program Trial (ADEPT)	6	10	60-90 years of age, with Alzheimer's Disease	This study looks at the impact of a supervised exercise program in early Alzheimer's disease.
Memory in Early Alzheimer's with Intranasal Insulin (MAIN)	8	30	60-90 years of age, with or without Alzheimer's Disease	This study looks at the effects of insulin on brain function using nasal insulin spray and functional MRI scanning.
Antioxidant Defense	25	40	60-90 years of age, with or without Alzheimer's Disease	This study examines the brain using a novel Neuroimaging technique measuring chemicals in the brain related to oxidative stress.
Fluency Study	17	35	Enrollment Closed	This study's goals are to evaluate thinking abilities in participants with early Alzheimer's disease.
Cognitive Training	3	30	60-90 years of age, with very mild Alzheimer's disease	This study is looking at stroke, dementia, and motor changes to see variances in the brain with functional MRI imaging.
Self-Care TALK to promote Spousal Caregiver Health	46	--	Enrollment Closed	This study is examining the benefits of a health program on caregiver health.
KU Brain Aging Project (BAP)	162	225	Enrollment Closed	The goal of this study is to examine how structural MRI brain changes related to various lifestyle factors, including fitness and physical activity.
DHA Neuroprotective Study	10	20	Enrollment Closed	This study will evaluate the ability of docosahexaenoic acid (omega 3 fatty acid contained in fish oil) to slow the progression of Alzheimer's disease.
Alzheimer's Disease Neuroimaging Initiative (ADNI)	28	--	Enrollment Closed	This national study examines how brain imaging and other tests can measure the progression of mild cognitive impairment (MCI) and early Alzheimer's disease.
Valproate in Dementia (VALID)	15	12	Enrollment Closed	This study will determine if valproate delays the onset of behavioral problems and Alzheimer's disease progression.
Elan 301/302	4	14	50-89 years of age with Alzheimer's disease	This study is evaluating the study drug, Bapinezumab, and its effect on decreasing beta amyloid (protein) deposits in the brains of subjects with Alzheimer's disease.
Elan 201	3	5	Enrollment Closed	This study is evaluating the oral form of the study drug and its effect on decreasing beta amyloid (protein) deposits in the brains of subjects with Alzheimer's disease.

For more information, or to see if you would qualify for one of these studies, please call the KU Alzheimer & Memory Research Line at 913-588-0555.

Physical Fitness Linked to Less Brain Shrinkage in Memory Areas in Alzheimer's Disease

Results from the Brain Aging Project suggest that higher levels of physical fitness is associated with less brain shrinkage in regions important for memory. These results suggesting that maintaining fitness may modify Alzheimer's disease-related brain atrophy (shrinkage) were presented this summer at the International Conference on Alzheimer's Disease (ICAD) 2008 by Dr. Robyn Honea, PhD.



The report by Dr. Honea and colleagues follows a paper published by the research group in the July 15 issue of Neurology which found an association between physical fitness and whole brain volume in early AD patients. In this follow-up investigation, the AMP researchers looked at the association between physical fitness and regional brain volumes using an MRI-based technique called voxel-based morphometry (VBM). This is a new technique that allows investigators to scan within the brain to look for smaller changes in regions affected by Alzheimer's disease. Sixty-three individuals in the early stages of AD and 56 normal controls participated in the MRI and treadmill testing (to assess peak oxygen consumption, a standard measure of physical fitness).

Dr. Honea is quick to point out that they will need to study the effects of exercise through a randomized trial to examine more closely whether the relationship they observed between fitness and brain changes is actually one of cause and effect. They also plan to follow the individuals originally enrolled in the Brain Aging Project over time to further examine the role of physical fitness in Alzheimer's disease (see Page 5, Brain Aging Project Reaches Critical Juncture). Finally, Dr. Honea hopes to investigate if these changes in the brain occur at a cellular and genetic level.

The figure demonstrates where fitness is related to preserved hippocampal volume in patients with early Alzheimer's disease (arrow). The hippocampus is responsible for learning and memory in the brain, and is one of the first areas damaged by Alzheimer's disease. It is also one of the only areas of the brain that can undergo new growth of brain cells or neurogenesis.

Alzheimer's Association Memory Walk

Ten members of the KU Alzheimer and Memory Program participated in the annual Memory Walk sponsored by the Alzheimer's Association to join the fight against Alzheimer's disease. The walk took place in Corporate Woods on Saturday, October 4, 2008. Over 2600 people participated in the walk and more than $345,000 was raised.

Thanks for Your Donations!

The Alzheimer & Memory Program would like to thank all of those giving contributions to our research efforts. We would not be able to do any of our work on Alzheimer's disease and memory without your help. The Alzheimer & Memory Program (AMP) is funded entirely through federal grants and private donations. To become a contributing member and a "Friend of the Alzheimer & Memory Program, please call Brett Blackwelder with KU Endowment, at 913-588-5230. You may also contribute on our website by clicking the "Become a Friend of the Alzheimer & Memory Program" link on the left hand side of the screen at www.KUAlzheimer.org.

Your gifts to our program can also be memorial donations or gifts to honor someone.

Another Way to Help!

Congress has extended IRA rollover gifts through 2009.

An easy option for making a gift from your IRA assets has been extended into 2008 and 2009. The recent "bailout" legislation extends the "Charitable IRA Rollover" provision. This means that if are at least age 70-1/2, you can direct a distribution from your IRA directly to KU Endowment for the benefit of the KU Alzheimer and Memory Program. It is a simple transaction and one that allows you to unlock the dollars in your IRA to make charitable gifts without a tax "cost" to you.

To make a gift from your IRA, you must instruct your plan's administrator to transfer a distribution directly from your account to KU Endowment. An individual may give up to $100,000 a year and the distribution will count toward your mandatory minimum distribution.

IRA Rollover gifts may be advantageous for:

- Donors who do not itemize their deductions
- Donors who lose tax deductions as their adjusted gross income increases
- Donors who are subject to the 50% annual charitable deduction limitation
- Donors with more modest incomes where adding social security to their income would cause more of their payments to be taxable

Whatever your circumstances, you will find a direct distribution simpler than the two-step process of taking a withdrawal followed by a charitable contribution. To discuss the details of an IRA Charitable Rollover gift, please contact Brett Blackwelder in KU Endowment for more information at 913-588-5230.

KU Brain Aging Project Reaches Critical Juncture

The KU Brain Aging Project, launched in November 2004, has completed its initial enrollment with 162 participants and is now asking participants to return for their second round of evaluations two years after the first. "We've completed repeat assessments on over 50 of the original enrollees but we have a long way to go to finish these important assessments," says Pat Laubinger, the study coordinator of the Brain Aging Project.

Recent published results of the Brain Aging Project suggest that enhanced physical fitness may slow the brain shrinkage related to Alzheimer's disease (see article page 4). "The importance of a high return rate of our original study participants cannot be overstated," says Jeffrey Burns, M.D., who leads the study. "It is extremely important to validate our findings by assessing how fitness and physical activity levels impact rates of brain aging over time." Participants in the Brain Aging Project will be contacted to consider returning for their repeat assessments approximately 18 - 24 months after completing their original evaluations.

INTRODUCING OUR NEW STAFF

Anita L. Macan, MPA, CCRP

Anita joined the Alzheimer and Memory Program at the University of Kansas Medical Center (KUMC) as Director of the Clinical Trial Unit on June 30, 2008. Anita brings 10 years experience in academic medical research conduct and administration of phase I, II, III and correlative science clinical trials as well as behavioral interventions serving both in the School of Medicine and School of Nursing at KUMC. Prior to joining our program, she served as Research Operations Manager in the School of Nursing working with researchers on caregiver studies. In addition to Anita's years of multi-center and investigator initiated medical research, other positions demonstrating her academic and administrative experience include Teleoncology Coordinator, the first Palliative Care Service Coordinator, Telehospice® Program Manager, Senior Coordinator for Southwest Oncology Group (SWOG) NIH funded cooperative group studies, Hematology and Oncology Administrative Manager and Fellowship Program Coordinator.

Anita earned a Master of Public Administration degree from the University of Missouri-Kansas City. She is certified as a Clinical Research Professional and holds memberships in the Society of Clinical Research Associates (SoCRA), the Heartland Association of Research Professionals (HARP) and Pi Alpha Pi, the Honor Society for Public Administration.

Eric Vidoni, PT, PhD

Eric Vidoni is a physical therapist and new Postdoctoral Fellow in the KU Alzheimer and Memory Program. Dr. Vidoni is interested in movement, an interest he developed during his undergraduate coursework which culminated in a Bachelors of Science in Kinesiology from the University of Illinois, Urbana-Champaign in 2001. After a year of working as a research coordinator studying visual attention and airport security screening at the Beckman Institute for Advanced Science and Technology at Illinois, he resumed his formal education at the University of Kansas Medical Center in the Department of Physical Therapy and Rehabilitation Sciences where he studied how individuals learn new skills. Specifically, his dissertation work explored the role of sensation in learning new movements following brain damage. After receiving his PhD in January 2008, Eric has joined the KU Alzheimer and Memory Program to use functional magnetic resonance imaging (fMRI) and other techniques to investigate changes in motor abilities and independence of daily function resulting from Alzheimer's disease.

Cherie Parker, MSN, ARNP, BC

Cherie Parker received her B.S. in Medical Records Administration from the University of Kansas in August 1990. She graduated from Barry University with her B.S. in Nursing in 1995. She completed her M.S.N. in 1999 at Florida Atlantic University and became a board-certified adult nurse practitioner. Cherie joined the KU Alzheimer and Memory Program, part-time, in June of this year and is coordinating research studies and assisting with patient care. She is also working on her PhD at the University of Kansas School of Nursing with a special interest in caregiver research. Cherie is a member of the nursing honor society Sigma Theta Tau International.

INTRODUCING OUR NEW STAFF

Natalia Loskutova, MD

Natalia is a graduate student in the Department of Physical Therapy and Rehabilitation Sciences. She is working towards her PhD in the area of physical health of patients with dementia; particularly she is interested in bone health. She joined the KU Alzheimer and Memory program in the spring of 2008 to work with diffusion tensor imaging to examine bone remodeling in Alzheimer's disease and its relation to brain health, cognition, and other measures of physical health. Natalia graduated with honors from Medical Academy in Russia in 1998. She worked as a staff psychiatrist in a psychiatric hospital in Russia. The major clinical observation she made during all these years is that despite the "loss of contact with reality" patients with psychiatric issues can have very real physical issues that are often not addressed because treating staff concentrates on the patients' hallucinations.

Using Our Five Senses

Knowing the wants and needs of our loved ones are so important for caring for them. Perhaps they might be having a hard time finding the right words to let us know what they want OR understanding what we are asking them. Using your 5 senses is a place to start.

EYES
- Watch for actions and/or reactions to certain situations
  - ✓ Their likes and dislikes
  - ✓ Look for something that is calming to them—perhaps something they enjoyed in the past, such as music, singing, reading, saying a prayer
  - ✓ Watch for body language—theirs and ours

EARS
- Listen
  - ✓ To what they are saying
  - ✓ For key words to clarify the message they are trying to convey.
  - ✓ Read between the lines. What they are saying might not be what they mean.
  - ✓ Give them your full attention when they are talking.

SPEECH
- Speak slow and soft.
- Watch what we say. Our love ones hear and understand much more then we realize.
- Watch how we speak to them. There is more to it then just words.
- There are layers of meaning in the tone we use.

Communication is broken down into:
Visual (body language) 55%
Voice/Tone 38%
Words..... 7%

TOUCH
- Give gentle hugs.
- Never touch from behind— that might startle them.

SMELL
- Sometimes going outside for a breath of fresh air is good for everyone.

Remember……
A FRIEND IS SOMEONE WHO KNOWS THE SONG IN YOUR HEART AND CAN SING IT BACK TO YOU WHEN YOU HAVE FORGOTTEN THE WORDS.