KU BRAIN AGING PROGRAM NEWSLETTER

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Dr. Burns Receives NIH Career Development Award

Dr. Jeffrey Burns has recently been awarded the prestigious National Institute of Health (NIH) Mentored Patient-oriented Research Career Development Award (K23).

This five-year award will provide support for Dr. Burns and for the development of the Brain Aging Program. There are currently three clinical research studies within the Brain Aging Program: The Brain Aging Project, Alzheimer's Disease Neuroimaging Initiative (ADNI) and Valproate In Dementia (VALID).

This award is available to support the career development of investigators focused on patient-oriented research. The NIH is committed to increasing the number of clinicians and scientists involved in high-quality research.

These awards are given to investigators in the early stages of their career for growth and development. The NIH awards approximately 80 Career Development Awards per year.

Dr. Burns' award is specifically sponsored by the National Institute of Neurological and Stroke Disorders. For more information, give us a call at 913-588-0555.

KU BRAIN AGING PROGRAM
The University of Kansas Medical Center

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
National Institutes of Health

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Studies At A Glance:

Study Name	BRAIN AGING PROJECT	ADNI: ALZHEIMER'S DISEASE NEUROIMAGING	VALID: VALPROATE IN DEMENTIA
Number	104	12	10
Target	225	16	12
Criteria	60-90 years of age With or without memory problems 2 Year Study	55-90 years of age With or without memory problems 3 Year Study	55-90 years of age Moderate Alzheimer's Disease 2 Year Study

IF YOU, OR ANYONE YOU KNOW, LIKE ADDITIONAL INFORMATION ABOUT ENROLLING IN ANY OF THESE STUDIES, PLEASE CALL 913-588-0555.

Nobel Prize Winner Dr. Eric Kandel To Visit Kansas City Area

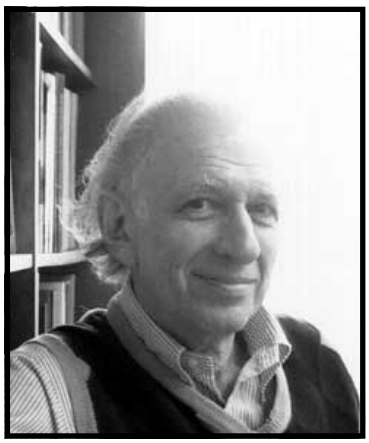
Dr. Eric R. Kandel, 2000 Nobel Prize Recipient of Physiology/Medicine and Professor at Columbia University will be coming to Overland Park, Monday, September 11th from 7:30-10:00 p.m.

Dr. Kandel will speaking at the Lewis and Shirley White Theatre of the Jewish Community Center at 5801 West 115th Street, Overland Park, Kansas.

The event is free to the public. Please obtain tickets in advance from receptionist at Jewish Community Center, 913-327-8000 or at KU Medical Center at 1011 Murphy.

Book signing will follow the presentation. Copies of Kandel's *In Search of Memory*, will be available for purchase.

Dr. Kandel is Professor of Physiology and Cell Biophysics, Psychiatry, Biochemistry, and Molecular Biophysics at Columbia University and resides in New York City.



Dr. Eric Kandel

RESEARCH COLLABORATIONS

Attention and Interference Abilities Across the Lifespan

Barbara M Quaney, PT, PhD

Research Assistant Professor, Landon Center on Aging

Dr. Quaney and Dr. Burns are collaborating on a project to determine how aging impairs our ability to focus and pay attention. The study is seeking healthy volunteers to take part in the "Attention and Interference Abilities Across the Lifespan" study. Participants will undergo two types of neuroimaging scans, 'functional magnetic resonance imaging' (fMRI) and 'magnetoencephal-ography' (MEG).

Each of these tests measures brain activity while participants perform a short computerized test (Stroop Test). fMRI examines how water molecules in the brain behave in the presence of a magnetic field. MEG involves the measurement of the weak magnetic signals generated by the brain's normal electrical activity. Both tests are noninvasive and painless. Each scan will take approximately 1 hour; total participation about 3 hours. This project is part of a larger 5-year NIH grant (Quaney, PI), "Motor Performance and Cortical Changes Post-Stroke." **For more information, to enroll in this study, please contact the Brain Aging Program at 913-588-0555.**

Dr. Quaney is also seeking participants for another study, "Does Aerobic Fitness Benefit Cognitive and Motor Learning After Stroke?" Dr. Quaney's study will determine if individuals with chronic stroke show motor and cognitive learning benefits from aerobic fitness training. Findings from this research may impact future rehabilitation treatments for stroke survivors.

She will study a total of 60 individuals, healthy older adults or those who have experienced stroke. Participants will undergo cardiac stress testing to determine their fitness level and then participate in an 8-wk stationary biking program, 45-minutes/session, three times/wk. Participants will also undergo approximately three hours of motor and cognitive skills tests prior to and following the exercise program. This 4-year project is funded by the American Heart Association

Dr. Quaney received her Bachelors of Science in physical therapy from the University of Kansas, and her Masters and Doctorate in Exercise Science and Motor Control from the University of Iowa. Her research integrates three areas of motor control research: 1) motor learning and the memory systems underlying the control of complex movements such as reaching or grasping, 2) upper extremity sensorimotor adaptations that occur with stroke, and 3) rehabilitation strategies to improve sensorimotor dysfunction after stroke-related central nervous system injury.

Future aims are to understand how to efficiently drive restoration of motor and cognitive abilities after stroke through rehabilitation interventions. For more information or for enrollment in Dr. Quaney's studies, please contact,

Virginia Barnes, 913-588-1747.

10th Annual Alzheimer's Disease Conference in Madrid, Spain

The 10th Annual International Conference on Alzheimer's Disease and Related Disorders (ICAD) was held in Madrid, Spain from July 15 – 20, 2006. More than 5,000 researchers from 50 countries gathered to share information regarding the latest findings on Alzheimer's disease and related disorders.

Dr. Burns presented the first results of the ongoing KU Brain Aging Project. The initial study results indicate that Alzheimer patients have similar fitness levels and capacity for exercise testing. On average, individuals with early Alzheimer's performed as well on exercise testing as those without cognitive impairment, suggesting that individuals with early Alzheimer's Disease have a similar capacity to perform vigorous exercise. Additionally, Dr. Burns presented preliminary data on the relationship between blood insulin levels and brain changes as measured by imaging.

Many presentations given during ICAD focused on early detection and diagnostic efforts. The focus on early detection reflects the emerging idea that Alzheimer disease develops for a decade or more before signs are detectable.

Other findings discussed advances in imaging methods of Alzheimer disease. New approaches to imaging, such as diffusion tensor imaging and perfusion MRI were discussed. Dr. Burns states that "The most exciting developments are in the field of imaging, where the ability to potentially image Alzheimer disease brain pathology is rapidly progressing."

Many treatment possibilities were also presented during ICAD. The majority of possibilities explored aspects of the amyloid hypothesis. Some scientists chose to explore other potential therapies, including intranasal insulin, growth factor gene therapy, dietary supplements, and immunotherapy. Some of the trials presented during the conference have failed in large-scale trials, some are still on-going, and some are struggling to show any results. Dr. Burns noted "there are promising strategies for better Alzheimer's treatment that are continuing to develop, but still remain far from clinical use."

Another theme throughout the conference was the idea of primary prevention. This is similar to prevention of other diseases, such as in the field of cardiology. "The hope is to find ways to reduce the risk or preventing the disease completely with lifestyle changes or medications," Dr. Burns states.

The ICAD conference gives many scientists and physicians a chance to gather together to explore and present the multitude of up-to-date information on Alzheimer disease. There continues to be exciting developments in the field of Alzheimer's disease, and with conferences such as ICAD, scientists and physicians all around the world will benefit from their continuing work.

ACTIVE BODY, HEALTHY BODY!!

Participate in Alzheimer's Association Memory Walk!

It's that time of year for the Alzheimer's Association's Memory Walk.

The event will take place Saturday, October 7th, 9:00 a.m.at Corporate Woods in Overland Park, KS.

Every step we take brings us closer to improved treatments and potential cures.

You may walk alone or with a team, one mile or three miles. If you're unable to attend the walk and still want to help, be a "Phantom Walker" and turn your donations into the Alzheimer's Center.

Monies raised will be used for programs and services for families of area Alzheimer's Association Chapters.

For more information, please contact: Trisha at 913-831-3888 or trisha.mcclanahan@alz.org . To register online, please visit: www.kansascitymw.kintera.org.

ACTIVE MIND, HEALTHY MIND!!

Answers to Last Edition's IQ Crossword Puzzle!

Answers for "IQ"

L	O	G	I	C		C	H	A		M	O	C	H	A
I	D	E	A	L		I	A	N		A	R	L	E	S
M	I	A	M	IQ	U	A	R	T	E	R	B	A	C	K
P	E	R		U	T	O	P	I	A			S	H	E
			C	E	E			S	T	R	I	P	E	D
A	B	E	L		S	S	T		E	I	N			
T	A	X	I	S		T	O	U	R	N	IQ	U	E	T
T	H	I	N	K		A	Y	N		G	U	S	T	O
A	N	T	IQ	U	A	T	E	D		S	I	D	O	N
			U	L	M		D	O	E		T	A	N	S
A	N	G	E	L	I	C			M	U	Y			
L	E	O			N	O	G	A	I	N		B	S	A
C	H	A	R	C	O	A	L	B	R	IQ	U	E	T	S
O	R	D	E	R		S	A	C		U	S	E	U	P
R	U	S	S	O		T	D	S		E	A	R	N	S

Crossword printed in Volume 1, Edition 1 (May 2006). You may also view this at www.dana.org.

KU BRAIN AGING PROGRAM
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MEET THE BRAIN AGING TEAM!

NEW STAFF ADDITIONS:

Anne Arthur, BSN, ARNP

Anne received her B.S. in Psychology with a minor in Biology from the University of Nebraska-Lincoln in 2001. She graduated from Creighton University with her B.S. in Nursing in 2002. Anne has recently completed her M.S. in Nursing from the University of Kansas School of Nursing.

She will be joining our team in the fall as a Nurse Practitioner caring for patients in the Alzheimer and Memory Clinic. Anne is a member of the National Conference of Gerontological Nurse Practitioners and the nursing honor society Sigma Theta Tau—Delta Chapter.

June Yi, RN

June Yi joined the team in May 2006 as Clinical Research Nurse, working on the VALID study, and also working in the Alzheimer's and Memory Clinic.

June became an LPN through JCCC in 2004, graduated from the JCCC-ADN program in 2005, and received her RN license in 2005. She is currently attending KU School of Nursing to obtain her BSN degree.

She previously worked at KU Hospital in Unit 41-General Med/Surg and Renal floor.

June assists our team on the all Clinical Research Studies. She also performs neurological and cognitive assessments of patients in the clinic and research settings.

June has been in Kansas for most of her life, after moving here at the age of six from Seoul, S. Korea.

George P. Thomas, Jr.

George is a graduate research assistant working with Dr. Burns on the Brain Aging Program. He is studying the changes that occur with brain aging and Alzheimer disease using a variety of advanced neuroimaging and statistical tools. He is also a student in the MD-PhD program at KU School of Medicine and Graduate Studies.

Prior to coming to KU in 2004, George taught at the University of Bridgeport in Bridgeport, Connecticut. He has taught anatomy, bone tumor pathology, and radiation physics. He is a graduate of both Park College and Cleveland College.

"New Game"

Give This Puzzle a Shot!!

Brain Power!!

Answers found at bottom of page.

Did you know that when large numbers of smart people leave one country to work in another, it's called a brain drain? Use your head to come up with other "name game" rhyming expressions based on the following clues. If you get three or more, you are clever indeed - and four or more puts you in right in the middle of genius territory (brain terrain)!

Headache

Chief genius

Simple mind

Smart folks in Madrid

Fast learner on the job

Tune you can't get out of your head

What a neurology professor does

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Comments? Suggestions? Complaints? Words of Praise?

Send your Newsletter feedback to Stacy Picek

at spicek@kumc.edu or via phone at 913-588-0602.

ALZHEIMER'S MEMORY LIBRARY

- *The Brain Aging Program and the Alzheimer's and Memory Center has established a Memory Resource Library.*
- *The Memory Library contains information for patients with AD and their caregivers, such as: Books, Movies, DVDs, CDs, Pamphlets, Articles, a wealth of Resources*
- *You may check out items Monday-Friday from 9:00 a.m.-4:00 p.m.*
- *Library located in the Alzheimer's & Memory Clinic in the Landon Center on Aging*
- *For more information, please contact Phyllis at 913-588-6981*

"New Game" Answers from above: 1. BRAIN PAIN 2. MAIN BRAIN 3. PLAIN BRAIN 4. SPAINS BRAINS 5. BRAINY TRAINEE 6. BRAIN REFRAIN 7. EXPLAINS BRAINS

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KU BRAIN AGING PROGRAM
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THE ALZHEIMER'S DISEASE AND MEMORY DISORDER'S CLINIC SPONSORS A MONTHLY

CAREGIVER SUPPORT GROUP

Dealing daily with a family member who has Alzheimer's disease can be an overwhelming and challenging task for every caregiver. Our support group is designed to enhance caregiver's information about the disease; provide resources for caring for the patient; promote the self-care and health of caregivers; and allow caregivers to share information and support for one another.

Meetings are held on the **second Thursday of each month from 2:00 p.m. to 3:30 p.m.** in room 145 at the Landon Center on Aging at 3599 Rainbow Blvd., Kansas City, KS 66160.

No reservations are required. Light refreshments will be served. Call Phyllis at 913-588-6981 if you have any questions.

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The University of Kansas Medical Center

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Landon Center on Aging
Kansas City, KS 66160

Mailing Address:

Check Us Out!!

http://www.kumc.edu/kubap/