BUADC Bulletin

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In This Issue:

American Academy of Neurology
Meeting

New Faculty

StoryCorps Visit

Alfred Davis Receives Prestigious Award

Ir. Alfred Davis, a founding member of the Boston University Alzheimer's Disease Center (BU ADC) Community Action Council, recently received the prestigious Community Health Leader Award from the Robert Wood Johnson (RWJ) Foundation. Each year, the RWJ Foundation honors ten leaders in the field of community health who have developed key services within their communities, sometimes despite many barriers.

Mr. Davis was initially nominated for the Community Health Leader Award by BU ADC Education & Information Transfer Core member Dr. Nancy Emerson Lombardo. His nomination was strongly supported by several other BU ADC faculty and staff. Letters of reference were enthusiastically provided by many Boston community leaders who have admired Mr. Davis and his accomplishments for many years. For example, Joyce Williams, Associate Director of Central Boston Elder Services, said, "I am inspired by Al's humility and consistent devotion to the health and well-being of Boston Housing Authority's tenants and elders in family settings...I marvel at his ability to motivate his staff, peers, supervisors, and others."

Mr. Davis's vision is to foster a network of healthy lifestyle programs for low-income urban seniors, which started with his leadership in the Boston *Alfred Davis Award continued on page 4* >



RWJ Award ceremony attendees (left to right): Dr. Michelle Washko, Ms. Valerie Nolen, Dr. Nancy Emerson Lombardo, Mr. Alfred Davis, Ms. Anna Bissonnette

PAIRS Program Provides Education Outside of Classroom

In an effort to advance the education of Boston University (BU) medical students, the BU Alzheimer's Disease Center (ADC) Education & Information Transfer Core launched the PAIRS Program in September 2007. The program, which "pairs" first-year BU medical students with "buddies" who have early stage Alzheimer's disease (AD) or a related cognitive impairment, augments both the students' medical education and clinical skill development. The BU ADC program replicates the highly successful and award-winning "Buddy Program" developed by Ms. Darby Morhardt at the Northwestern University ADC in Chicago, IL. Both programs focus on fostering relationships between future physicians and older adults, allowing the medical students to better understand how aging adults function with a neurodegenerative diagnosis.

During the current academic year, seven medical students are participating in the BU ADC PAIRS Program, either because of a developing interest in neurology and geriatrics or because of a personal experience with AD. "We are quite excited about this new educational initiative because it offers an excellent opportunity for medical students to learn firsthand about cognitive and functional changes associated with pathological brain aging and its impact on patients and their families," said Dr. Angela Jefferson, PAIRS Program Director and BU ADC Education & Information Transfer Core Co-Director.

Since the program's launch this past fall, students *PAIRS Program continued on page 4* >

American Academy of Neurology Meeting

The 60th Annual American Academy of Neurology (AAN) Meeting was held April 12th-19th, 2008 in Chicago, IL. Bringing together more than 10,000 neurologists, neuroscientists, neuropsychologists, and allied experts, the AAN Meeting is one of the largest venues for presenting educational and scientific information to neurology researchers and clinicians.

At this year's meeting, **Dr. Andrew Budson**, Associate Professor of Neurology and Director of the Geriatric Research Education and Clinical Center at the Bedford VA Hospital, received the 2008 Norman Geschwind Prize in Behavioral Neurology. This prestigious honor is awarded yearly for outstanding research in the field of behavioral neurology. Dr. Budson's research has focused on understanding memory and memory



Dr. Andrew Budson, AAN Award Recipient

distortions in patients with Alzheimer's disease (AD) with innovative techniques that use both computerized memory tests and high-density event-related potentials to determine precisely how brain physiology changes in normal aging and in AD.

Additionally, several investigators and affiliates of the Boston University Alzheimer's Disease Center (BU ADC) attended and presented research at this year's AAN meeting. For instance, **Dr. Anil Nair**, a BU ADC neurologist and Assistant Professor of Neurology, presented research examining the scoring consistency among behavioral neurologists on the Clock Drawing Test. This test is a popular screening tool for AD and related dementias. Findings from Dr. Nair's research suggest that neurologists had moderate to excellent reliability when using a subjective scoring system. Colleagues on this research project included BU ADC faculty members **Dr. Robert Green, Dr. Robert Stern, Dr. Alan Mandell**, and **Dr. Sanford Auerbach**, as well as **Mr. Eric Steinberg**, HOPE Project Manager and BU ADC nurse practitioner.



Dr. Lee Goldstein, new faculty member

New Faculty Member

The Boston University Alzheimer's Disease Center (BU ADC) is pleased to welcome Lee E. Goldstein, MD, PhD as a new research affiliate of the BU ADC. Dr. Goldstein was recently recruited to Boston University from Harvard Medical School and the Brigham & Women's Hospital, where he was Director of the Molecular Aging & Development Laboratory and the Center for Biometals & Metallomics.

Dr. Goldstein and his team transitioned to the Boston University School of Medicine, College of Engineering, and Photonics Center this past fall. Dr. Goldstein is joining the faculty in the departments of Psychiatry, Ophthalmology, Neurology, Pathology & Laboratory Medicine, Biomedical Engineering, and Photonics. He

will continue to direct his research program from two Boston University laboratories, the first at the new BioSquare Research Park on the Boston Medical Center campus and the second at the Photonics Center in the Engineering complex on the Charles River campus.

Dr. Goldstein completed his undergraduate studies at Columbia University and received a joint MD/PhD degree from Yale University. His team's research focuses on understanding the role of abnormal protein aggregation in chronic degenerative disorders of aging, including Alzheimer's disease (AD), age-related cataracts, and other common diseases of aging that involve pathogenic protein aggregation. He and his laboratory are developing innovative laser-based molecular diagnostic technology for early pre-symptomatic detection and screening of AD. Dr. Goldstein is a founder, director, and consultant to Neuroptix, a leading laser diagnostic company based in Acton, MA.

Research Update

Decisional Capacity in Mild Cognitive Impairment

Dr. Angela Jefferson, principal investigator of the ADMIRE (Aging and Decision Making) study, and her colleagues recently found that some individuals with mild cognitive impairment (MCI) perform differently on decisional capacity measures assessing their ability to provide informed consent to a complicated but hypothetical clinical trial when compared to their cognitively normal peers. Dr. Jefferson's work is in collaboration with Dr. Jason Karlawish, the Education & Information Transfer Core Director of the University of Pennsylvania Alzheimer's Disease Center. These findings are scheduled to appear in the *Journal of the American Geriatrics Society* later this spring.

Functional Impairment in Mild Cognitive Impairment

Dr. Angela Jefferson and colleagues have also recently published findings in the *American Journal of Geriat-ric Psychiatry* on the functional abilities of individuals with MCI. Their findings suggest that older adults with MCI do not differ from their cognitively normal peers on traditional measures of functional assessment. However, error-based measures of functional skills may capture the subtle evolving functional decline associated with MCI. These error behaviors are most strongly associated with verbal learning performance, possibly secondary to the hallmark memory impairment associated with MCI.

Ibuprofen's Effects on Mice Brains

Drs. Ann McKee, Neil Kowall, and Alpaslan Dedeoglu presented findings in *Brain Research* related to their work with ibuprofen and triple transgenic Alzheimer's disease (AD) type mice. AD type mice had improved performance on a water maze test after being fed ibuprofen-supplemented food. Those mice also showed significant decreases in oligomeric beta amyloid (Aß) and hyperphosphorylated tau immunoreactivity in the hippocampus. The research team's findings suggest that ibuprofen can reduce both cognitive deficits and the Aß and tau deposits that are believed to be contributing factors to AD in mice.

Memory Enhancements with Pictures

Dr. Brandon Ally and colleagues recently found that, compared to words, pictures increase memory by enhancing recollection in healthy older adults. Inter-

estingly, this picture superiority effect is significantly greater in patients with AD. That is, the degree to which patients remember pictures compared to words is far greater among patients with AD than healthy control subjects. Dr. Ally and his team are currently investigating what memory processes are associated with this finding and they are developing strategies, such as mental imagery, to improve memory for words.

Parietal Lobe Function

Dr. Andrew Budson, in collaboration with Drs. Jon Simons and Brandon Ally, has used converging data from functional magnetic resonance imaging, event-related potentials, and patients with brain lesions to better understand the role of the parietal lobe in memory function in younger and older adults. The research team speculated that the parietal cortex is important for an individual's subjective recollective experience, and findings from this study were recently published in *Neuropsychologia*.

StoryCorps Visits Boston University

On November 15th, 2007, the StoryCorps Memory Loss Initiative visited the Boston University Alzheimer's Disease Center (BU ADC). Story-Corps is a national, independent, nonprofit project with the mission of honoring and celebrating the lives of everyday people through preservation of oral histories. The StoryCorps Memory Loss Initiative was launched in 2006 to encourage people with memory loss to share their life stories. As part of this initiative, six BU ADC research participants with Alzheimer's disease were interviewed by their family members about poignant moments in their lives. StoryCorps audio-recorded the interviews and provided each family with a copy of the recording. "For individuals with memory loss, the StoryCorps interview offers the family a lasting gift of the words and recollections of their loved one," said Erin Whalen, Associate Coordinator of the HOPE Study and BU ADC Recruitment Coordinator. StoryCorps is among the largest oral history projects in the country, with select audio recordings being archived at the Library of Congress and featured on National Public Radio.

Another StoryCorps visit to the BU ADC is planned for September 23, 2008. For more information about participating, please contact Ms. Erin Whalen at 617-414-1078 or ewhalen@bu.edu.

Housing Authority. For the past 15 years, Mr. Davis has been the Program Director of Resident Services for the Boston Housing Authority. His program provides services for 4,100 low-income seniors and disabled residents in 35 buildings located throughout Boston. Mr. Davis's community health work took off in 2000 when he launched an innovative, community-based blood pressure screening program. As a result of this screening process, one Boston Housing Authority senior resident was rushed to the emergency room due to dangerously high blood pressure. Mr. Davis was so affected by this experience that he became determined to provide healthy lifestyle activities to improve the health and function of Boston Housing Authority residents.

The centerpiece of Mr. Davis's activities is the "Put a Swing in Your Life" golf program, inspired by professional golfer, Tiger Woods. The program offers innovative exercise for Boston Housing Authority residents with cognitive and physical activity in addition to social interaction. Each of these factors has been reported to have a protective effect against Alzheimer's disease. The golf program provides African American seniors with access to an attractive, convenient exercise program. Mr. Davis believes access to such programs is essential to close the health gap for low-income seniors, especially persons of color. Notably, similar healthy brain initiatives are currently being promoted by the National Institute on Aging, which also funds the BU ADC.

The RWJ award provides recipients with \$125,000 to help them expand their programs, so Mr. Davis will be able to make an even greater impact in his community. The BU ADC faculty, staff, and affiliates congratulate Mr. Davis for his passionate commitment to Boston's urban elders and for this well-earned recognition of his many accomplishments.

Greater Boston Memory Walk

The Memory Walk is the Alzheimer's Association's national signature fundraising event. Last fall, the Boston University Alzheimer's Disease Center (BU ADC) organized a team of faculty, staff, family members, and research study participants, who participated in the Memory Walk, raising more than \$20,000 to benefit the Alzheimer's Association. This year, the BU ADC invites you to support the Alzheimer's Association by joining our team and participating in the Greater Boston Memory Walk on September 28th. For more information, please log onto our website at www.bu.edu/alzresearch.



PAIRS Program students (left to right): Ruju Rai, Jami Johnsen, Ryan Heinrick, Yee Seng Ng, Joe Donahue, Ravi Kahlon, and Dan Kirshenbaum.

< PAIRS Program continued from page 1

and "buddies" have met for monthly activities, such as watching football games, reminiscing about memorable vacations, or taking walks. For the older adult participants, these activities provide an opportunity to get to know the students while contributing to their clinical training. Students also meet monthly with the PAIRS Program staff to discuss their "buddy" interactions and to receive ongoing education about AD, caregiver issues, and current treatment options. As a result of the monthly "buddy" activities and educational sessions, the students have broadened their understanding of the aging population and developed a better sense of what life is like for patients with AD and their families. "A great thing about the PAIRS Program is the balance it gives to our education," said current PAIRS Program student Jami Johnsen. "We might learn what proteins are involved in AD, but that doesn't teach you much about what having that disease means to a patient or their family."

Ms. Darby Morhardt, founder of the Northwestern University ADC "Buddy Program," said, "I was delighted when the BU ADC expressed interest in replicating our Buddy Program. Over the years, students have responded with much gratitude for the experience of getting to know someone in the early stages of dementia outside of a clinical setting and in a way that they can never learn from a textbook. The PAIRS Program allows Boston University medical students the opportunity to have this unique experience which they will undoubtedly carry with them for years to come. I look forward to our continued collaboration."

The PAIRS Program is being funded, in part, by a generous educational grant from the Kenneth B. Schwartz Center. For more information about the PAIRS Program, please contact Ms. Erin Whalen at 617-414-1078 or ewhalen@bu.edu.

Actively Recruiting StudiesStudy Type Study Title Study Description

study Type	Study Title	Study Description
BU ADC Research Registry	HOPE: Health Outreach Program for the Elderly	This longitudinal study increases our understanding of age-related changes in memory and thinking. It serves as the Boston University Alzheimer's Disease Center's (BU ADC) main research registry, where participants agree to be contacted regarding other BU ADC-approved studies. HOPE participants are encouraged to participate in the actively recruiting studies summarized below.
Caregiving Support & Education	CARE-Plus	This study examines whether an educational intervention with caregivers can reduce behavioral problems in patients with Alzheimer's disease (AD) and improve caregivers' emotional well-being. Participation consists of a 5-week intervention with weekly sessions on AD, its symptoms, and tips for improving communication and interactions. The individual with AD is not involved in this study.
	Home Safety Education	This study compares two types of education to find out if they help caregivers make home safety modifications. Eligible participants include persons with AD (or related dementia) and caregivers living with a person with AD (or related dementia). This study includes two home visits for data collection and safety education. After three months, each participant is offered the alternative education.
	PAIRS Program: Partnering Medical Students with AD Patients	This program pairs first-year medical students with patients with early-stage AD or related cognitive impairment. It seeks to educate the medical students about the care and support-related issues faced by patients with AD and provide patients with the opportunity to informally interact with students. Student-patient pairs meet monthly to participate in activities together throughout the academic year.
Genetics	MIRAGE: Multi-Institutional Research in Alzheimer's Genetic Epidemiology	This study evaluates the association between genetic (hereditary) and non- genetic risk factors for AD. The study is recruiting people with a diagnosis of probable AD who have a sibling without AD who would be willing to partici- pate with them. The study is being conducted at multiple sites in the United States and abroad.
Memory & Cognition	Home-Based Assessment	This study seeks to detect cognitive changes in adults aged 75 years or older, comparing three at-home methods: (1) paper questionnaires with live telephone interviews; (2) automated telephone interviews; or (3) examinations by way of an easy-to-use computer (provided to participants for the study).
	Understanding False Memory in AD	This study seeks to understand why patients with AD and other dementias frequently remember things that never happened. The goal of this NIA-sponsored study is to provide ways to reduce false memories in patients with dementia.
Neuroimaging	Heart & Brain Aging	This study uses sensitive heart and brain imaging techniques and cognitive measures to better understand relations between heart and brain health among aging adults with mild memory loss. Participants attend a single study visit and undergo cognitive testing and brain and heart imaging.
Treatment	Investigational Clinical Amyloid Research in Alzheimer's *new study	This multi-center treatment trial will evaluate whether a new medication, Bapineuzumab, increases the clearance of beta amyloid from the brain. Beta amyloid is believed to be the initial cause of AD. This treatment study is looking for adults between 50 and 89 years of age with an AD diagnosis. Participants will need a study partner who can accompany them to study visits.

For more information, please contact the BU ADC Recruitment Coordinator, Ms. Erin Whalen, at 617-414-1078 or ewhalen@bu.edu

BU ADC Happenings

Welcome

The Boston University Alzheimer's Disease Center (BU ADC) welcomes Dr. John Smolinksy as a new clinical neuropsychology postdoctoral fellow. Dr. Smolinsky is working with veterans with neurological conditions, including conducting neuropsychological assessments and cognitive rehabilitation. Dr. Smolinsky is also participating in clinical research focused on enhancing memory recall in aging adults with Alzheimer's disease (AD). We also extend a warm welcome to our new student trainees. Margaret Brown is a nurse practitioner student from the Massachusetts General Hospital Institute of Health Professions. She is specializing in gerontology and will be observing patient visits under the mentorship of Mr. Eric Steinberg, BU ADC nurse practitioner and HOPE Study Project Manager. Monique Pimontel is pursuing a master's degree in the BU Graduate Medical Sciences Program with an emphasis in mental health and behavioral medicine. She is assisting the BU ADC Education & Information Transfer Core with recruitment and outreach efforts under the mentorship of Dr. Angela Jefferson.

Congratulations

Dr. Brandon Ally was recently honored with the Laird Cermak Award for memory research from the Massachusetts Neuropsychological Society. The award is given to junior investigators who contribute to the research community's understanding of memory processes. Dr. Ally will be presenting his award-winning research at the October 2008 meeting of the Massachusetts Neuropsychological Society.

Dr. Isabel Carreras recently received a career development award to investigate the role of beta-amyloid

(Aß) oligomers in tau phosphorylation, neuronal cell death, and cognitive decline in AD. Dr. Carreras will be working with BU ADC investigators for this project with mentorship from Dr. Alpaslan Dedeoglu, BU ADC Transgenic Mouse Core Co-Director; Dr. Neil Kowall, BU ADC Director and BU ADC Transgenic Mouse Core Co-Director; and Dr. Ann McKee, BU ADC Neuropathology Core Director.

Dr. Alpaslan Dedeoglu, BU ADC Transgenic Mouse Core Co-Director, recently had his Veteran's Administration Merit Award renewed for four additional years. Dr. Dedeoglu's project, "Therapeutic Strategies in a Transgenic Mouse Model of AD," assesses transgenic mouse brains and the correlation between Aß and neurofibrillary tangles with magnetic resonance imaging, magnetic resonance spectroscopy, and cognitive function. He is also investigating the effect of non-steroidal anti-inflammatory drugs and other compounds that may alter Aß aggregation.

Susan Hiraki, the REVEAL Study Project Manager and BU ADC Genetics Counselor, recently passed both the American Board of Genetic Counseling and Canadian Association of Genetic Counseling certification examinations.

Goodbyes

Many thanks and best wishes to the BU ADC staff and trainees who have recently taken new positions. Mayuri Thakuria, former Project Manager for the Flurizan and ADAPT studies, is now the Assistant Director and Clinical Scientist in breast cancer research at Wyeth Pharmaceuticals. Sita Yerramsetti completed her public health student practicum with the BU ADC Education & Information Transfer Core and is completing her master's in public health program coursework.

Save the Date

International Conference on Alzheimer's Disease

July 26-31, 2008, Chicago, IL

This conference, sponsored by the Alzheimer's Association, is the largest international meeting of Alzheimer's disease (AD) professionals. Researchers and healthcare providers will gather to present cutting-edge research and education about AD.

International Academy of Nutrition and Aging Conference

Aug. 1-2, 2008, Albuquerque, NM

This conference features workshops and presentations by leaders in the field of nutrition and aging, focusing on the effects of nutrition and exercise on AD and dementia.

www.serdi-fr.com/ABQ

Dementia Care Conference

Aug. 24-27, 2008, Garden Grove, CA

This annual national event for dementia care professionals features the latest developments in AD care and support.

www.alz.org/careconference

www.alz.org/icad

Honorary and Memorial Contributions

The Boston University Alzheimer's Disease Center (BU ADC) is involved in a variety of clinical, research, and education activities regarding Alzheimer's disease (AD). These activities are funded by grants awarded from the National Institutes of Health and non-profit organizations. Often, research study participants, families, or members of the public wish to contribute to the fight against AD, and these private donations are equally important to advancing the BU ADC's mission. The BU ADC welcomes donations in the form of honorary or memorial contributions, as these gifts are an excellent way to pay tribute to a family member or friend while making a contribution to the advancement of research in the field of AD.

Please call Catherine Pfau at 1-888-458-2823 or visit us online at www.bu.edu/alzresearch if you would like to make a donation.

In Memory of Pauline Conway

Colleen Robichaud

In Memory of Kenneth Lumsden

Kristina Lumsden

In Memory of John C. Sousa

Sacca Electric LLC

In Memory of Richard A. Wiberg

Sven J. and Jean Wiberg

In Honor of Dr. Andrew Budson

Henry and Barbara Wojcik

In Honor of Dr. Robert Green

& Dr. Robert Stern

Janet Abrams

Research Center Contact Information

If you have questions or comments about the BU ADC or this newsletter or if you wish to make a donation to support the BU ADC, please contact:

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Telephone: 1-888-458-BUAD

Email: buad@bu.edu

Check out our website at www.bu.edu/alzresearch

Alzheimer's Disease Center Leadership

The Boston University Alzheimer's Disease Center (BU ADC) is primarily supported through a grant from the National Institute on Aging. The BU ADC supports cutting-edge research and provides education and clinical care to families affected by Alzheimer's disease. Its leadership is listed below, alphabetically by Center Core.

Neil Kowall, MD, Center Director, Administrative Core Director, and Transgenic Mouse Core Co-Director

Richard Fine, PhD, Administrative Core Associate Director

Robert Green, MD, MPH, Clinical Core Director and Center Associate Director

Robert Stern, PhD, Clinical Core Associate Director

Christine Chaisson, MPH, Data Core Director

Kathy Horvath, PhD, RN, Education & Information Transfer Core Co-Director

Angela Jefferson, PhD, Education & Information Transfer Core Co-Director

Ann McKee, MD, Neuropathology Core Director

Alpaslan Dedeoglu, MD, PhD, Transgenic Mouse Core Co-Director

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Clinic Information

The memory clinics affiliated with the Boston University Alzheimer's Disease Center (BU ADC) provide comprehensive care for older adults with memory loss. BU ADC clinicians offer memory diagnostic workups, medical treatment, support to patients and families, ongoing consultation, and cutting-edge research opportunities, including clinical trials. BU ADC clinicians are available at the following locations:

Alzheimer's Disease Clinical & Research Program (ADCRP)

ADCRP Clinic Boston University Medical Campus Robinson Suite 7800 Boston, MA 02118 Telephone: 617-638-7100

Boston University Neurology Associates (two locations)

Memory Assessment Clinic Boston Medical Center Doctor's Office Building, 7th Floor Boston, MA 02118 Telephone: 617-638-8456

Memory Assessment Clinic 1221 Main Street, Suite 401 Weymouth, MA 02190 Telephone: 781-331-9944 Edith Nourse Rogers Memorial Veterans Hospital Geriatric Research, Education, & Clinical Center (GRECC, for veterans)

GRECC Dementia Management Clinic 200 Springs Road, GRECC Bedford, MA 01730 Telephone: 781-687-2701

GRECC Memory Diagnostic Clinic 200 Springs Road, GRECC Bedford, MA 01730 Telephone: 781-687-3240

