The “Driving & Dementia” Research Study

What would you do if your spouse were driving down the highway and became slightly confused when it came time to take an exit? Or if this same person brushed a curb while driving down the road? For many people, this situation would not be alarming. However, if the person driving has cognitive impairment, these seemingly innocent incidents may be perceived in a much different light. Family members and friends of people with dementia often ask: What should I do if I see my loved one having trouble with driving? How long can safe driving continue after a person has a diagnosis of dementia? How can I speak with my loved one about what I’ve seen in a sensitive and productive way? For those who receive the diagnosis of dementia, limiting or giving up driving is a tremendous milestone, one described by many caregivers as among the most difficult issues they face with their partner. Driving is deeply connected to our sense of independence, control and identity. And knowing when a person with dementia should limit or stop driving is an issue with which many—people with dementia, caregivers, and health providers alike—struggle.

To address this important issue, researchers at the BU ADC (Dr. Robert Stern, Principal Investigator) have teamed up with the Massachusetts Institute of Technology (MIT) AgeLab and the Hartford Financial (continued on page 3)

Medicare Part D: A Consumer’s Guide

Alzheimer’s disease affects many older adults, and the cost of medications is one of its many burdens. Help may be available, however, through the new Medicare Part D prescription drug coverage plan (effective January 2006), and it’s not too late to enroll. If you enroll before the May 15th deadline, you may pay lower premiums. While the Part D plan has caused confusion among many older adults, most communities are offering information sessions open to the public. Seniors should call their local Councils on Aging or pharmacies for further information. Below are guidelines to assist those who may be eligible for Medicare Part D, but who are uncertain of how to choose a plan.

Step 1: Make a list of all of your current medications. The list should include drug names, dosages, frequency, and cost per month. Indicate whether you receive your medications by mail or from the local pharmacy.

Step 2: Consider the variables associated with your current prescriptions, such as cost and convenience.

Step 3: Choose a trusted friend or relative to support and advise you during the selection process.

Step 4: Contact the SHINE organization to arrange for further assistance in selecting a plan that will best meet your needs. See information below.

Serving Health Information Needs for Elders (SHINE)

Part of the state Office of Elder Affairs, SHINE is sponsoring informational sessions through local Councils on Aging. For more information, call 1-800-243-4636 and press “2” after the automated voice greeting. Counselors will assist you with inquiries regarding upcoming informational sessions or arrange an individual consultation appointment with a trained SHINE volunteer.
BU ADC Co-Sponsors International Conference on Wellness and Dementia

The 2005 Boston Alzheimer’s Symposium, “Wellness for Persons with Dementia,” was held this past October in Marlborough, MA, sponsored by Rogerson House/Communities and Carleton-Willard Homes, Inc. Over 200 participants attended sessions on nutrition, exercise, cognitive stimulation and other practice innovations. Distinguished faculty from around the world, including Dr. Bruno Vellas from France and Dr. Akira Ueki from Japan, presented their latest research findings.

The BU ADC co-sponsored the event, led by Dr. Nancy Emerson Lombardo, Faculty Coordinator for the symposium. Dr. Emerson Lombardo presented evidence in support of her Memory Preservation Diet, designed to reduce risk and slow progression of AD. This diet will be the subject of an upcoming book chapter in the Research and Practice in Alzheimer’s Disease and Cognitive Decline series. Dr. Emerson Lombardo also presented on her study of the use of acupuncture to promote quality of life for people with AD. BU ADC Clinical Core Director Dr. Robert C. Green, Course Director for the symposium, delivered one of eight “mini-keynote” addresses, discussing how epidemiology and genetics research have provided a better understanding of risk factors for AD. Education Core Co-Director Dr. Kathy Horvath presented a breakout session focused on home and community safety issues.

Prior to the symposium, an Expert Consensus Summit on Wellness for Persons with Dementia was held at Massachusetts General Hospital. The summit brought together national and international experts in the field to exchange ideas and frame future directions for research and policy. Attendees included government leaders and policy-makers (including representatives from the national Centers for Disease Control), as well as local community organization leaders. Dr. Emerson Lombardo organized the summit, focused on four domains related to wellness in dementia: 1) Nutrition and Herbal Treatments; 2) Physical Exercise; 3) Cognitive Training; and 4) Other Non-Pharmacological Approaches (e.g., alternative therapies). The summit resulted in recommendations for research, policy, and clinical practice which will be disseminated to policy-makers nationwide, as well as agencies such as Alzheimer’s Disease International.

Research Suggests Ways to Maintain “Brain Health”

An active area of AD research concerns brain health. An increasing number of studies suggest that brain vitality in later life is positively correlated with social stimulation, mental activity, physical exercise, and diet. As a result of such research, public health education programs have been developed encouraging older adults to “maintain their brains” through diet and lifestyle choices such as in the table below.

<table>
<thead>
<tr>
<th>Social Stimulation</th>
<th>Physical Exercise</th>
<th>Mental Activity</th>
<th>Diet</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Traveling</td>
<td>• Walking briskly</td>
<td>• Adult education courses</td>
<td></td>
</tr>
<tr>
<td>• Volunteering</td>
<td>• Bicycling</td>
<td>• Crossword puzzles</td>
<td></td>
</tr>
<tr>
<td>• Joining a local club</td>
<td>• Swimming</td>
<td>• Reading</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Gardening</td>
<td>• Learning new skills (e.g., in music, language)</td>
<td></td>
</tr>
</tbody>
</table>

For More Information:

Alzheimer’s Association’s “Maintain Your Brain” program

This program addresses lifestyle modifications that may help individuals reduce their risk of developing AD. To learn more, visit this website: www.alz.org/maintainyourbrain.

“Can Alzheimer’s Be Prevented?” Brochure

To order a free copy, call the national AD Education and Referral Center at 1-800-438-4380, or visit its website: www.alzheimers.org/pubs/PreventingAD/TOC.htm.
Encouraging Results from Flurizan Clinical Trial

Results from the Flurizan Study were recently presented at the national Society for Neuroscience meeting. The Phase 2 trial of Flurizan monitored patients with AD for one year, at which time the group of mild patients taking Flurizan showed less decline in cognition (as measured by the ADAS-cog scale) than did the placebo group. Patients with mild AD on Flurizan were then followed for 3 additional months and showed a 14% improvement in their ADAS-cog score; by 18 months their mean score was further elevated, for a total average improvement of 33%. A Phase 3 trial is now underway at 100 sites nationwide. Dr. Robert C. Green of the BU ADC is one of two lead investigators on the national study, as well as its site director at BU. He commented, “We are excited to be providing this compound to Boston area patients with mild AD. The Phase 2 results are encouraging, and the Phase 3 trial will answer the question of whether this compound is effective or not. If it is, we will have an entirely new and exciting approach to treating AD.” For more study information, contact Mayuri Thakuria at 617-638-5619.

Alzheimer’s Disease Neuroimaging Initiative

Recruitment is now underway at the BU site of the national Alzheimer’s Disease Neuroimaging Initiative (ADNI). ADNI is a $60 million, 5 year public-private partnership, sponsored by the NIH, to determine whether brain imaging can help predict onset and monitor progression of AD. The study is taking place at approximately 50 sites across the U.S. and Canada. The noted poet and author Maya Angelou has recently been named a national spokesperson for the project. For more information, contact Patrick Compton at 617-414-1196.

Risk Evaluation & Education for Alzheimer’s Disease (REVEAL)

The REVEAL Study (Robert C. Green, Principal Investigator) is the first study to examine the impact of providing genetic susceptibility testing to adult children of people with AD. A total of 280 participants have been enrolled in the four-site clinical trial, including 86 individuals here at BU. The study is now closed to new enrollment, and we are more than halfway through data collection. An application for renewed funding for the study has been submitted to the National Institutes of Health. An overview of results from the first REVEAL clinical trial was published in the December 2005 Journal of Geriatric Psychiatry & Neurology (Scott Roberts, lead author).

(Driving and Dementia, continued from page 1) Services Group, Inc. on an innovative study examining a novel educational program on driving and dementia. The goal of the study is to provide family caregivers the information they need to make decisions about driving that are best for everyone involved. The study intervention assists caregivers in many ways: identifying and interpreting driving warning signs; planning for productive conversations with a loved one about driving changes; enacting strategies for putting support in place; and working with a doctor on the driving decision. The study is geared not only to caregivers with active concerns about their loved one’s driving, but also those who would like to plan ahead for the future. In providing caregivers with the information they need, we hope to encourage a transition (when the time is right) that maintains the dignity and independence of the person with dementia, and encourages driving safety. As one participant commented, “I would recommend this study because it is useful in providing the confidence and tools to assess and address the driving issue.”

Previous study sites have included Lynn, Concord, and Milton. The study is currently recruiting caregivers throughout Eastern Massachusetts for educational groups. Sites being considered include Worcester, Brockton, Malden, Dartmouth, Attleboro, Sandwich, West Roxbury, Cohasset, and Duxbury. For more information, please contact study research assistant Jennifer Hunter at 617-414-1188 or study coordinator Stacy Carruth at 617-414-1187.
New Studies

Understanding False Memory in Alzheimer’s Disease

Researchers in Dr. Andrew Budson’s laboratory at the VA hospital in Bedford are working to understand false memories in Alzheimer’s disease. Dr. Budson was awarded a $1 million, 5-year grant from the National Institute on Aging to better understand why patients with AD sometimes claim to remember things that did not happen. “Patients frequently remember things that never happened, such as someone coming into the house every night and moving furniture around, or speaking with their long deceased parent. Although sometimes these are true delusions, more often they are false memories,” reports Dr. Budson. To understand these false memories, the researchers use simple computerized memory tests. Most studies are performed on laptop computers (see picture below). “We can perform the tests at BU, at Bedford, or in your home,” says Jill Waring, senior research assistant. Other studies use EEG to record the electrical activity of the brain while the person is remembering. “You wear a cap like a swimming cap,” says Ellen Beth, research assistant (pictured with cap at left), “and then we can see what your brain is doing when you are remembering.” The goal of these studies is provide the basis for ways to reduce false memories in patients with dementia. Patients, family members, and those in the community who are interested in participating in this research should contact the laboratory at 781-687-3360 or thebrainlab@yahoo.com. Most studies involve one or two visits which last 1 to 3 hours.

ADMIRE: Aging and Decision Making

ADMIRE is the first research study of its kind to investigate decision-making abilities of older adults with mild cognitive impairment. Funded by the National Institutes of Health, this study aims to enroll 100 participants to examine the impact of cognitive functions—such as memory, understanding, and judgment—on decisional capacity. “Adequate decision-making is a critical component of independent living. We are interested in the interaction between cognitive aging and decision making, with particular emphasis on decisions regarding research participation,” says Dr. Angela Jefferson, Assistant Professor of Neurology and Principal Investigator for the ADMIRE study.

The ADMIRE study involves a one-time visit to the General Clinical Research Center at the Boston University Medical Center. Participants will be asked to complete paper and pencil tasks measuring memory, problem solving, and language skills. They will be asked to consider participating in an imaginary research study, and respond to questions regarding their decision. Participants will receive information about how to prepare for important decisions that arise with age. This study is currently recruiting adults age 55 years or older, both with and without memory problems. The emphasis of ADMIRE is on individuals with Mild Cognitive Impairment or Alzheimer’s disease. To learn more about participating in this study, please contact Susan Lambe at 617-414-1077 or susanl@bu.edu.
### Actively Recruiting Studies

<table>
<thead>
<tr>
<th>Study Type</th>
<th>Study Title</th>
<th>Study Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory &amp; Cognition Studies</td>
<td>HOPE: Health Outreach Program for the Elderly</td>
<td>This longitudinal study increases our understanding of age-related changes in memory and thinking. It also serves as the Center’s main research registry, where participants agree to be contacted regarding other ADC-approved studies.</td>
</tr>
<tr>
<td></td>
<td>ADMIRE: Aging and Decision Making</td>
<td>The goal of this study is to examine the impact of cognition (e.g., memory, language skills) on decision-making capacity among older adults with and without memory problems.</td>
</tr>
<tr>
<td></td>
<td>ADNI: Alzheimer’s Disease Neuroimaging Initiative</td>
<td>This nationwide study will test whether repeated imaging studies as well as other biological markers, clinical and neuropsychological testing can be combined to measure the progression of mild cognitive impairment and early AD.</td>
</tr>
<tr>
<td></td>
<td>Understanding False Memory in AD</td>
<td>This study seeks to better understand why patients with AD and other dementias frequently remember things that never happened. The ultimate goal of this NIA sponsored study is to provide the basis for ways to reduce false memories in patients with dementia.</td>
</tr>
<tr>
<td>Caregiving Support &amp; Education Studies</td>
<td>Driving and Dementia: Assisting Dementia Caregivers with the Driving Decision</td>
<td>A study which involves educational materials and small educational groups for caregivers aimed at informing them about how to determine if their loved one should continue to drive and how best to act on the decision to have the loved one stop driving.</td>
</tr>
<tr>
<td>Genetic Studies</td>
<td>MIRAGE: Multi-institutional Research in AD Genetic Epidemiology</td>
<td>This longstanding, federally funded study evaluates the association between genetic (hereditary) and non-genetic risk factors for Alzheimer’s disease. The study is being conducted at multiple sites in the U.S. and abroad.</td>
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<tr>
<td></td>
<td>LOAD: Late-onset AD genetics study</td>
<td>This nationwide study collects genetic and clinical information with the goal of understanding Alzheimer’s disease genetic and environmental risk factors.</td>
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<tr>
<td>Treatment Studies</td>
<td>CLASP: Cholesterol Lowering Agent to Slow the Progression of AD</td>
<td>This study tests the usefulness of simvastatin, a cholesterol-lowering drug, as a treatment to slow the progression of Alzheimer’s disease.</td>
</tr>
<tr>
<td></td>
<td>MYRIAD (Flurizan™)</td>
<td>The MYRIAD Study is a multi-national, multi-center study that will evaluate the effectiveness of a new medication, Flurizan, in slowing the progression of Alzheimer’s disease.</td>
</tr>
</tbody>
</table>

For more information, please call 1-888-458-BUAD.
ADC Happenings

Welcome New Fellows, Staff, and Trainees

We are pleased to welcome two new post-doctoral fellows to the BU ADC:

Brandon Ally, Ph.D., and Lee Ashendorf, Ph.D.

- Dr. Ally earned his doctoral degree in clinical psychology from the University of Southern Mississippi, and he completed his predoctoral residency and clinical postdoctoral fellowship under Dr. William Milberg at Harvard Medical School/Boston VAMC. Dr. Ally is now working in the Cognitive Neuroscience Laboratory at the Bedford site of the BU ADC.

- Dr. Ashendorf earned his doctoral degree from the University of Albany, State University of New York, and completed an internship at the West Haven site of the VA Connecticut Healthcare System. Dr. Ashendorf is completing his fellowship at the Bedford site of the BU ADC and is also serving as a consulting neuropsychologist for its HOPE Study.

We also would like to extend a warm welcome to our new ADC staff: Sue Lambe, who serves as the research coordinator for the ADMIRE study; and Kate Henderson, research assistant for the Flurizan and ADAPT studies. Our most recent volunteers include: Arshiya Ahuja, a 2004 graduate of Vassar College; Laura Byerly, a junior at Boston University; Rachelle Leong, a 2005 graduate of Wellesley College; Jennifer Luoma, a senior at Boston College; Katie Wang, a 2003 graduate of Harvard College; and Jessie Wolfe, a senior at Boston College.

Good-Byes

We say thank you to the following staff who have recently completed work at the BU ADC: Mary-Tara Roth, who recently accepted a position as Research Subject Advocate in BU’s General Clinical Research Center after serving as the project manager for the ADAPT study; Janet Nafissi, who served as a Clinical Research Associate for the ADAPT study; and Sylvia Lambrechts, who was participant contact coordinator for the ADAPT study and is now attending the BU Graduate Medical Sciences program. We would like to wish you all the best of luck in your future endeavors!

Save The Date!

- Saturday, March 4

Northeastern University and the Caregiver Alliance are pleased to host their annual Caregiver Conference: “Caring for an Older Adult,” from 9:30 am – 3 pm at the Curry Student Center, Northeastern University. Caregivers are encouraged to attend this free program to better understand memory loss and to learn about resources for assisting older adults. A complimentary lunch and manicure or massage will be provided! For more information, contact Diane Sheehan at (617) 373-3109.

- Friday, April 7

The Alzheimer’s Association is hosting its Fifth Annual African-American Community Forum from 8 am – 2 pm at Russell Auditorium, 70 Talbot Ave., Dorchester, MA. For more information, call the Association toll-free at 1-800-272-3900.

- Monday, May 22

The annual HOPE Participant Appreciation Luncheon will be held at the Marriott Hotel in Newton, MA. A panel of experts from the BU ADC will share the latest information about research and clinical care for AD, and a free luncheon with prize giveaways will be provided! This event is open to participants in the BU ADC’s HOPE Study. For more information, call 1-888-458-2823.

This past October, the BU ADC team raised nearly $6,000 for the Massachusetts Alzheimer’s Association as part of its annual Memory Walk fundraiser.
Honorary and Memorial Contributions

The Alzheimer’s Disease Center welcomes honorary and memorial contributions. 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.

In Memory of Jeanne A. (Menard) Bourque
Mr. and Mrs. Harold Maccombie

In Memory of Dr. Robert S. Boyd
Dr. Meredith Green; Mr. and Mrs. David L. Smallwood

In Memory of Joseph E. Corbett
Ms. Denise Mehlman

In Memory of Elizabeth Cutcliffe
Ms. Valerie Belcher; Mr. and Mrs. Joseph Bradbury; Ms. Nancy Feingold-Palmer; Ms. Faith Horton; Mr. and Mrs. Thomas Fitzgibbons; Mrs. Corinne Ioannilli Panula

In Memory of Margaret Detweilder
Ms. Maura Mann

In Memory of Pearl Dipasquale
Mr. Henry Barber

In Memory of Millie Eppolito
Ms. Audrey Pekear

In Memory of Gertrude Garbowitz
Mr. and Mrs. Emil Raad

In Memory of Joseph Edward Holland
Ms. Rosalind Gordon

In Memory of Dagny Linnea Jansson
Mr. Bertil George Jansson

In Memory of Rita E. Kenney
Mr. John Scannell

In Memory of Frank B. Marshall, Jr.
Ms. Sandra Faber

In Memory of William Martin
Mr. and Mrs. Jeff Fishman

In Memory of Barbara Jean Mueller
Ms. Maurissa McGeary

In Memory of William J. Noering, Jr.
Mr. Gerald McNally, Jr.; Mr. and Mrs. Bill Engster; Mr. and Mrs. Thomas Noering

In Memory of Dr. Roston
Sharon and David Victor

In Memory of Mary Shea
Mr. and Mrs. Tony Speranzella

In Memory of Ruth Snider
Mr. and Mrs. Robert Perlman

ALZHEIMER’S DISEASE CENTER

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

Neil Kowall, MD, Center Director and Administrative Core 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
Suzette Levenson, MPH, EdM, Data Core Director
Kathy Horvath, PhD, RN, Education Core Co-Director
Scott Roberts, PhD, Education Core Co-Director
Robert Ferrante, PhD, MSc, Murine Breeding and Molecular Genetics Core Director
Ann McKee, MD, Neuropathology Core Director

The BU ADC Bulletin is published twice annually (Scott Roberts, Editor; Kathy Horvath, Co-Editor; Cailin Coleman, Editorial Assistant).
Research Center Contact Information

If you have general questions about ADC research, or specific questions or comments about this newsletter, please contact:

Catherine Pfau, M.M.H.S.
Administrative Manager, BU ADC
715 Albany Street, B-7800
Boston, MA 02118
Telephone: 1-888-458-BUAD
Email: buad@bu.edu

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

Clinic Information

We provide expert diagnostic evaluation and treatment services for memory-related problems. Our clinical services are available at several locations:

In Boston’s South End at BU Medical Campus:
Memory Assessment Clinic
Boston University Neurology Associates
Boston Medical Center
Doctor’s Office Building, 7th Floor
Boston, MA 02118
Telephone: (617) 638-8456

On the South Shore in Weymouth:
Memory Assessment Clinic
Boston University Neurology Associates
1221 Main Street, Suite 401
Weymouth, MA 02190
Telephone: (781) 331-9944

In Bedford (for veterans):
E.N. Rogers Memorial Veterans Hospital
GRECC Unit
200 Springs Road
Bedford, MA 01730
Telephone: (781) 687-2719