December 2009

- Findings from the Baltimore Experience Corps Study on the cognitive benefits of volunteering featured in ‘Old Is The New Young.’ (USA Today)

- Study finds that synergistic interactions between specific inflammatory diseases may increase the risk of frailty among older adults. (Journals of Gerontology)

- New article discusses the role of Gerontological Nurses in the Guided Care model. (Geriatric Nursing)

- Research finds that older African-American twins have a stronger correlation of educational attainment, suggesting that educational opportunities have broadened in the 20th century to better meet the individual abilities of African-Americans. (PLoS ONE)

- Study suggests that more systematic integration of physicians in home care processes may reduce subsequent hospital use among home health patients. (Medical Care)

  Watch Dr. Arbaje's latest TV segments: "Dealing with Blood Pressure" and "Giving from the Soul, Good for the Body." (abc2news.com)

The Johns Hopkins OAIC (Pepper Center) is currently seeking proposals for research support in 2010-2011. (JHU OAIC)

November 2009

- Dr. Boyd and colleagues receive funding for "Improving Clinical Practice Guidelines for Complex Patients" from AHRQ. (COAH News)
  COAH faculty member, Dr. Cynthia Boyd, recently received an R21 award from AHRQ as Principal Investigator. The grant is titled “Improving Clinical Practice Guidelines for Complex Patients”. Dr. David Kent, a COAH Seminars on Aging speaker last winter, will serve as PI of a Tufts University sub-contract. Co-investigators on the award include Drs. Bruce Leff, Ravi Varadhan, Carlos Weiss, and Jodi Segal from Johns Hopkins, and Drs. Katrin Uhlig and Tom Trikalinos from Tufts.

- Dr. Oh receives a Rosalinde and Arthur Gilbert Foundation / AFAR New Investigator Award in Alzheimer’s Disease. (COAH News)
  COAH faculty member, Dr. Esther Oh, MD, Division of Geriatrics and Gerontology, will receive a Rosalinde and Arthur Gilbert Foundation/AFAR New Investigator Awards in Alzheimer's Disease ($75,000 over two years). This award will support her investigation into the use of the oral glucose tolerance test as a tool in stimulating bio-markers of Alzheimer's disease.

- Exercise Capacity directly related to physiological reserves and frailty in older women. (Journal of Gerontology)
• Dr. Varadhan develops a statistical software package for solving large nonlinear systems of equations. (*Journal of Statistical Software*)

• Dr. Leff elected to Vice Chair of the Council of Subspecialty Societies and the Board of Governors of the American College of Physicians (*COAH News*)

COAH faculty member, Bruce Leff, MD, Division of Geriatrics and Gerontology, has been elected to Vice Chair of the Council of Subspecialty Societies (CSS) by the American College of Physicians. As CSS Vice Chair, Dr. Leff will also be a member of the American College of Physicians Board of Governors.

**October 2009**

• Hopkins investigators, led by COAH faculty member Dr. Ravi Varadhan, win AHRQ award to develop "Methods to Study the Heterogeneity of Treatment Effects in Comparative Effectiveness Research.* (*COAH News*)

Dr. Varadhan, who is a core member of COAH and a faculty in the Division of Geriatric Medicine and Gerontology, and his collaborators have just won a competitive award from the Agency for Healthcare Research Quality (AHRQ) to develop “Methods to Study the Heterogeneity of Treatment Effects in Comparative Effectiveness Research”, through the Johns Hopkins DEcIDE center. Dr. Varadhan is the Principal Investigator, and will collaborate with Drs. Carlos Weiss and Cynthia Boyd from our Division, Drs. Jodi Segal, Al Wu and Susan Zieman from General Medicine and Cardiology, and Dr. Constantine Frangakis from Dept Biostatistics. The award amount is $395,862. The project will be conducted in the period from 9/30/2009 to 01/29/2011. This project will review existing approaches to address heterogeneity of treatment effects and will develop new methods to facilitate applicability of trial evidence to target populations, such as older adults, who are poorly represented in clinical trials.

• Cumulative lead dose associated with persistently lowered cognitive function in older adults. (*Epidemiology*)

• Dr. Arbaje to present at 2009 Johns Hopkins Medicine annual women's conference, A Woman's Journey. (*Hopkins Medicine*)

**September 2009**

• Watch Dr. Alicia Arbaje's latest TV segment: "Elder Care: Hitting the Road" (*abc2news.com*)

• Functional recovery in Activities of Daily Living after disability associated with hospitalization for acute illness may occur between 6 months and 2 years. (*Journal of the American Geriatrics Society*)

• Experience Corps volunteers exhibit intervention-specific gains in executive function and prefrontal cortex brain activity. (*Journal of Gerontology*)

• Low socioeconomic status associated with increased odds of frailty. (*Journal of Epidemiology and Community Health*)
• **Guided Care**, a comprehensive health care model based in primary care, reduces net healthcare costs among older patients. ([American Journal of Managed Care](http://www.guidedcare.org/))

• Anemia associated with poorer performance on executive function and memory tests among older women. ([Journal of the American Geriatrics Society](http://www.jagss.org))

• Dr. Cynthia Boyd named a 2009 Beeson Scholar. ([Beeson.org](http://www.beeson.org))

**August 2009**

• Findings support aggregate abnormality with aging in multiple physiological systems may be an important cause of frailty and late life vulnerability. ([Journal of Gerontology](http://www.sagepub.com/))

• Dr. McNabney and colleagues provide educational sessions to geriatricians, gerontologists and other health care professionals that span the continuum of care for older adults. ([Journal of the American Geriatrics Society](http://www.jagss.org))

• Study finds worse perceptions of personal quality of care subsequent to periods of disablement among older adults. ([Disability and Rehabilitation](http://www.sagepub.com/))

• Dr. Jeremy Walston promoted to Professor of Medicine. ([COAH News](http://www.coah.org))

  Dr. Samuel C. Durso, Interim Director of the Division of Geriatric Medicine & Gerontology, issued the following message: "I am most pleased to announce that Dr. Jeremy Walston, Co-Director of the Biology of Frailty research group has been promoted to Professor of Medicine. Dr. Walston received his medical doctorate from the University of Cincinnati and completed a General Internal Medicine Residency and Geriatrics Fellowship at the Johns Hopkins University. Since joining the Division, his major clinical focus has been on geriatric rehabilitation medicine. He was the Medical Director of the Terrace Rehabilitation Unit for several years, and still regularly attends on that unit. His research interests have focused on the identification of physiological and molecular underpinnings of chronic disease, frailty, and late-life vulnerability. This research has resulted in an internationally recognized portfolio of frailty research that has been instrumental in helping to uncover important physiologic and molecular changes that contribute to late-life vulnerability. He leads the NIA-sponsored Johns Hopkins Older American Independence Center and is the PI of several other grants that focus on inflammation and on translational uses for molecular discoveries. In addition, he is a co-founder and co-director of the Biology of Frailty Program. In the school of nursing, where he holds a joint appointment, he regularly lectures on frailty and geriatric clinical care. In addition, he provides ongoing aging research and academic career mentorship for several highly successful junior faculty, post-doctoral fellows, and graduate students in the Division and across the Johns Hopkins Medical Institutions. Please join me in extending a hearty congratulations on the outstanding achievement.

**July 2009**

• Dr. Michelle Carlson and colleagues demonstrate positive cognitive effects of volunteering. ([CNN.com](http://www.cnn.com)). Please see Dr. Carlson’s journal abstract, currently in press, related
Objective: To determine whether Experience Corps (EC), a social service program, would improve age-vulnerable executive functions and increase activity in brain regions in a high-risk group through increased cognitive and physical activity. Methods: Eight community-dwelling, older female volunteers and nine matched, wait-list controls were recruited to serve in the ongoing EC: Baltimore program in three elementary schools. We employed functional magnetic resonance imaging (fMRI) pre and post intervention to examine whether EC volunteers improved executive function and showed increased activity in the prefrontal cortex relative to controls. fMRI volunteers were trained and placed with other volunteers 15 hours/week for 6 months during the academic year, to assist teachers in kindergarten through third grade to promote children's literacy and academic achievement. Results: Participants were African-American, and had low education, low income, and low Mini-Mental State Exam scores (mean=24), indicative of elevated risk for cognitive impairment. Volunteers exhibited intervention-specific increases in brain activity in the left prefrontal cortex and anterior cingulate cortex over the 6-month interval relative to matched controls. Neural gains were matched by behavioral improvements in executive inhibitory ability. Conclusions: Using fMRI, we demonstrated intervention-specific, short-term gains in executive function and in the activity of prefrontal cortical regions in older adults at elevated risk for cognitive impairment. These pilot results provide proof-of-concept for use-dependent brain plasticity in later life, and, that interventions designed to promote health and function through everyday activity may enhance plasticity in key regions that support executive function.

• Drs. Varadhan and Chaves use principal components analysis to determine that cardiac autonomic control is impaired in frailty. (Journal of Gerontology)

• Dr. Ravi Varadhan resents on advanced statistical methods for comparative effectiveness research at AHRQ Symposium. (COAH News)
On June 1-2, 2009 Dr. Varadhan gave an invited talk at the symposium on Clinical and Comparative Effectiveness Research Methods: II, which was hosted by the Agency for Healthcare Research and Quality (AHRQ) in Rockville, Maryland. The purpose of this symposium was to provide a forum for the scholarly deliberation of new and emerging research methods of scientists working in different disciplines and across settings. Dr. Varadhan’s presentation was entitled Methods to Evaluate Benefits in the Presence of Competing Risks of Death or Adverse Events which described advanced statistical methods for doing comparative effectiveness research in settings where competing risks are present. The following is the link to Dr. Varadhan’s presentation: Varadhan_ARHQ_2009.pdf. Also, more information regarding the symposium is located on the web at here. Full length manuscripts based on the symposium talks are expected to be published in a supplement to Medical Care in early 2010.

• Dr. Bruce Leff is named Director of COAH-East. (COAH News)
Dr. Samuel C. Durso, Interim Director of the Division of Geriatric Medicine & Gerontology, issued the following message: “I am extremely pleased inform you that Dr. Bruce Leff has agreed to serve as the Director of the Center on Aging and Health East (Bayview Campus). As many of you know, Bruce has led faculty and programs at COAH East with great energy and skill as Interim Director for a little more than two years. Under his leadership the faculty of COAH East have
grown in number and are developing impressive research in health services and the study of multi-morbidity in older adults. Dr. Leff is Associate Professor of Medicine at the Johns Hopkins University School of Medicine, with a Joint Appointment in the Department of Health Policy and Management at the Johns Hopkins University Bloomberg School of Public Health where he is also a member of the Health Services Research and Development Center and the Lipitz Center for Integrated Health Care. His principal areas of research relate to home care and the development, evaluation, and dissemination of novel models of care for older adults, notably the Hospital at Home model of care. In addition, his research interests extend to issues related to multi-morbidity and case-mix issues; is a member of the Johns Hopkins ACG development team. Dr. Leff cares for patients in the acute, ambulatory, and home settings. He is the Director of the Basic Medicine Clerkship at the School of Medicine and has received awards for his teaching and mentorship. He is a member of the Board of Governors of the American College of Physicians and the Board of Directors of the American Academy of Home Care Physicians.”

- COAH staff member Vijay Varma receives two Maryland House of Delegates scholarships, and is named a Roothbert fellow. (COAH News)

  Congratulations to Vijay Varma, Brain Health Substudy Research Assistant and current MPH student in the Johns Hopkins School of Public Health, who has received two House of Delegates scholarships from Maryland Higher Education Commission towards his academic studies. In addition, Vijay has been awarded a scholarship from the Roothbert Fund for the coming academic year.

**June 2009**

- Researchers identify gene variant that may influence longevity and inflammatory pathway activation. (Experimental Gerontology)

- Study provides insight into the potential roles of neutrophils and monocytes in the development of frailty. (Experimental Gerontology)