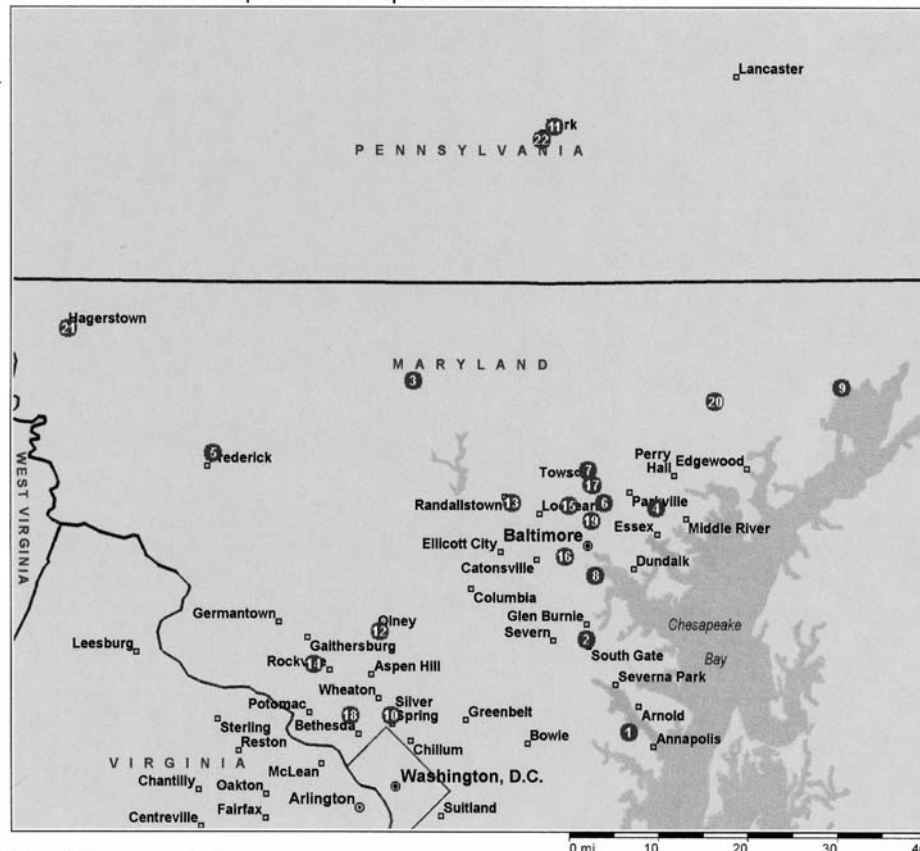


# ADVANCES *in Aging*

## Establishing a Hospital Network to Optimize Recovery Post Hip Fracture

Baltimore Hip Studies Hospital Network

- 1 Anne Arundel Medical Center
- 2 Baltimore Washington Medical Center
- 3 Carroll County Hospital
- 4 Franklin Square Hospital
- 5 Frederick Memorial Hospital
- 6 Good Samaritan Hospital
- 7 Greater Baltimore Medical Center
- 8 Harbor Hospital
- 9 Harford Memorial Hospital
- 10 Holy Cross Hospital
- 11 Memorial Hospital
- 12 Montgomery General Hospital
- 13 Northwest Hospital Center
- 14 Shady Grove Adventist Hospital
- 15 Sinai Hospital
- 16 St. Agnes HealthCare
- 17 St. Joseph Medical Center
- 18 Suburban Hospital
- 19 Union Memorial Hospital
- 20 Upper Chesapeake Medical Center
- 21 Washington County Hospital
- 22 York Hospital



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Since its founding, the Baltimore Hip Studies (BHS) has conducted research on more than 3,500 patient-volunteers and completed more than 25 studies on recovery from hip fractures.

It has done so by establishing a network of hospitals across the region where UMB staff can conduct hip fracture research on-site. Although, the University of Maryland Medical Center (UMMC) treats few older patients with non-trauma-related hip fractures, the incidence of hip fracture and its consequences is so profound that Jay Magaziner, PhD, MSHyg, professor in the School of Medicine's Department of Epidemiology and Preventive Medicine who directs the BHS, decided to initiate the first multihospital study of hip fractures in the United States at UMB in 1983.

"If you want to have an impact on medical practice and patient well-being, you cannot wait for patients to come to you," Magaziner, who also heads the department's Division of Gerontology, says when asked why he chose to study a condition uncommon at the UMMC. "You need to identify the issues that are worthy of investigation and go to those who have the problem and may benefit most from the solution."

Because of this need, the BHS began working with hospital administrations and orthopaedic services in community hospitals to recruit hip fracture patient-volunteers from the region. Today, the 22-member BHS hospital network includes most major hospitals in Maryland, as well as several in Virginia and Southern Pennsylvania.

"It is an essential component of the BHS's success," Magaziner says of the network. "Recruiting at other hospitals has enabled us to have access to a variety of hip fracture patients we never could have recruited in any one hospital. Patient-volunteers don't self-select into our studies. We go to them. Because of this, we have a broad representation, and we learn more about the many differences among these patients."

As a result, BHS investigators are internationally recognized for their work on recovery from hip fracture. The BHS hospitals network itself, Magaziner notes, is a model for translating research from the basic science bench to the clinic, and then to the community, where it

directly benefits patients. "In an era of growing recognition of the value of translational research, work in the BHS has helped establish the University of Maryland as a leader in this emerging interdisciplinary area," he says.

**Denise Orwig, PhD**, associate director of the BHS who coordinates the hospital network, says it can take [\[continued page 2\]](#)

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[from page 1] a year or more to set up a study in the hospitals network. In general, between five and ten BHS studies, which can run for several years, are active or pending at any given time.

"Before a study can begin, the BHS meets with each participating hospital's IRB, its medical records division, its admissions and orthopaedics departments, and other hospital units," Orwig, an assistant professor in the Division of Gerontology, says. "A study is ultimately assigned to a hospital based on several factors, including the study's goals, its duration and eligibility requirements, the number and gender of patient-volunteers needed, and the hospital's location."

### **BHS Hospitals Network Benefits Hospital Staff and Patient-Volunteers**

Over the years, the BHS has built a rapport with the staff at each network hospital. "We have great relationships with the hospital staff," Orwig says. "They know us and are very interested in the work we're doing. We keep them informed about the research, but at the same time we've set up the studies so our staff is doing everything, and we are not adding to the hospital staff's burden."

**Barbara Resnick, PhD, CRNP**, a professor in the School of Nursing who has worked with the Baltimore Hip Studies team since 1988 and is the principal investigator for a recent BHS study, agrees that the network is a great model of partnering and offers advantages to both BHS researchers and network hospital staff.

One advantage for the staff, is education. "We provide grand rounds for the orthopaedists and conduct informal lunch-and-learning meetings with the nursing and therapy staff, which are always greatly appreciated," Resnick says.

The patient-volunteers also benefit, in several ways. "The BHS volunteers want to participate in the studies to help other hip fracture patients in the future," says Orwig. "But they also get a lot out of the interpersonal relationships, the contact with our staff, and being involved with and engaged in the research process."

**Mona Baumgarten, PhD**, an associate professor in the Division of Gerontology who is now conducting a pressure ulcer study at nine BHS network hospitals

(Carroll County Hospital, Holy Cross Hospital, Frederick Memorial Hospital, Shady Grove Adventist Hospital, Suburban Hospital, Washington County Hospital, Montgomery General, York Hospital, and Memorial Hospital of York), says of the study's patient-volunteers: "I think they appreciate the opportunity to connect with the study nurse who comes to visit them and perform a skin inspection every other day for three weeks." Baumgarten adds: "Very strong and warm connections have been made through this interaction."

The BHS also sends a quarterly newsletter to patient-volunteers to keep them informed about the long-term progress of BHS research. "The newsletter has an educational and interactive component to help patient-volunteers learn more about hip fractures in an engaging way," Orwig notes.

### **Recent and Upcoming Research at BHS Network Hospitals**

The BHS now has seven active studies and several others pending. One of the largest ongoing studies is Baumgarten's pressure ulcer study.

"Pressure ulcers represent a significant problem in terms of patient suffering and cost of care," she says. "By identifying settings and patient characteristics associated with especially high risk, the study will provide essential information for clinical practice, for health care planning, and future clinical trials." Baumgarten's team is in the process of developing a multihospital, randomized clinical trial of a pressure ulcer prevention program for hip fracture patients.

Another active BHS study is examining a group of hip fracture patients previously not studied in detail: men. "Most of what is known about outcomes and recovery following hip fracture comes from studies of women," Magaziner, the study's primary investigator, says. "This study will provide new data on outcomes and metabolic changes that occur following a hip fracture in men."

For the study, patient volunteers are currently being recruited from Greater Baltimore Medical Center, Northwest Hospital, Union Memorial Hospital, Franklin Square Hospital, and Sinai Hospital of Baltimore. Plans are under way to add three additional hospitals to this study.

One reason men are being studied now, Magaziner says, is because more men are living long enough to experience hip fractures. "Today, 25-30 percent of hip fractures occur in men, but by 2025, the number will be the same as it is for women today," Magaziner says. "Another reason is because men die following hip fracture at twice the rate women do. More than 35 percent die within one year of breaking their hip, and researchers are trying to find out why."

In addition to these active BHS studies, several others have recently concluded or are pending. Resnick, Orwig, and several co-investigators recently finished a study at nine network hospitals on how an exercise-and-motivation intervention helped improve recovery in hip fracture patients. This work also is being developed into a multicenter, randomized clinical trial that will involve investigators in three geographic areas with the goal of using a home exercise program to enhance post-fracture recovery.

Eun-Shim Nahm, PhD, RN, an assistant professor in the School of Nursing, will begin a study in the summer of 2007 on developing an online support program for caregivers of older adults with hip fracture. "The role of caregivers is particularly important during recovery because they are a significant source of motivation for adults to follow their rehabilitation regimens and improve their health behaviors," says Nahm, who adds that few resources exist for hip fracture patients' caregivers.

"With the increasing number of online users, an online resource program could be an effective way to provide these caregivers with the support they need," she says.

In addition, Ram Miller, MD, MS, an assistant professor in the Department of Epidemiology and Preventive Medicine in the School of Medicine, is leading efforts to investigate the role inflammation plays in poor outcomes from hip fracture. Magaziner says: "The hope is that this work will help us understand more about the benefit of exercise and other post hip fracture intervention efforts." ■

# Center for Robotics and Exercise Develops Programs for Patients with Neurological Disorders



Dr. Richard Macko and a study participant.

The Maryland Center for Exercise & Robotics in Disability and Aging is a new Center grant for research into identifying and testing ways to improve cardiovascular health, motor function and to minimize disability in individuals with neurological illnesses. The Center was awarded to the VA Maryland Healthcare System and resides in the Baltimore VA Medical Center Geriatric Research Education and Clinical Center (GRECC). The Principal Investigator of the Maryland Center for Exercise & Robotics in Disability and Aging is **Dr. Richard Macko**, Professor of Neurology and Associate Director of Research for the GRECC.

The goals for the center include developing and testing exercise therapies to empower stroke survivors to improve their cardiovascular health, fitness, and fight back against the disability of stroke and dissemination of these programs to the community. Toward that end, there are three studies specifically designed to test new exercise programs.

**Exercise Training in Hemiparetic Stroke** compares the relative effectiveness on stroke survivors of a six-month treadmill training program progressed on velocity (the speed of the treadmill) versus one progressed on duration (time spent on the treadmill). All participants train on a treadmill in a medically supervised environment

three times a week for six months.

Participants are randomly assigned to either the velocity or duration group and progressed according to standardized guidelines. At the conclusion of six months, all participants will be tested for improvements in level of cardiovascular fitness, functional gait, time walking and changes in the brain reflecting new gait learning. All participants will receive repeat testing three months after the conclusion of exercise to test the durability of these changes.

**Reshaping Exercise Habits and Beliefs (REHAB)** is designed to improve exercise adherence by improving participants' confidence in their ability to exercise at home following discharge from rehabilitation. The program educates all survivors about the risk factors for recurrent stroke. For the exercise group, it also provides a home-based regimen of walking and customized daily "homework" tasks tailored to disability. The program identifies and addresses barriers to mobility during the early stroke recovery period. All participants are called weekly for 12 weeks, and the exercise group receives additional encouragement to exercise daily and maintain a record of activities. Participants also wear activity monitors periodically during the study to track progress. Regular performance of individually designed exercise programs assists survivors in improving daily activities and normal function on tasks, with the ultimate goal of resuming social roles.

**Robotics-Assisted Exercise after Stroke** is a study designed to utilize the advances in robotics technology that present opportunities to develop novel rehabilitation strategies aimed at improving mobility in gait-impaired stroke patients. In this study, robotic devices attached to the weakened pelvis and ankle have been designed to assist the patient-initiated step

to completion, allowing sufficient practice and repetition to improve ambulatory gait through treadmill training. Specifically, this study will be the first to test the safety, tolerability and adjustment to the robot devices, first in healthy volunteers and then in stroke survivors. The second phase of the study will track whether the inclusion of the robot devices will significantly improve treadmill walking, compared to those treadmill walking without the devices, over a three-month training period. Changes in brain function as a result of the treadmill training will be measured using Functional Magnetic Resonance Imaging (fMRI) and electroencephalography (EEG), both when training ends and at three-months post-exercise.

**Upper-Extremity Robotics Rehabilitation.** Since 1985, the MIT-Manus has been intensively studied in assisting arm recovery after hemiparetic stroke. Research study shows that the planar (tabletop-flat plane only) MIT-Manus is effective in improving upper-extremity motor control across the elbow and shoulder, even in individuals with more severe arm impairments. We now investigate a computer programmable multi-planar robot that can assist the stroke survivor in moving the partly paralyzed arm in any direction. This research will be developed along with investigations of new wrist and hand robotics modules. The overall goal will be to optimize robotics-assisted, task-oriented exercises of functional reach, which includes reach, grasp and pinch. This research is conducted in collaboration with a Veterans Administration multi-center cooperative robotics research trial.

These studies build on work conducted by Dr. Macko over the past 10 years with stroke survivors at the Baltimore VA Medical Center/Center for Research in Aging. At the start of the treadmill training programs, many had trouble walking, required support, and could only walk for minutes at a time at one-tenth the speed of a health adult. After six months, the treadmill walking increased to 40-minute sessions, and many showed significant improvements in physical fitness and walking ability. According to Dr. Macko, "Many stroke survivors may think that their window (for recovery) closes three months after stroke, but our research and other research has shown that [\[continued page 4\]](#)

# EDUCATION *Highlights*

*Advances in Aging* is published by the University of Maryland Center for Research on Aging, the University of Maryland Geriatrics and Gerontology Education and Research program, the Claude D. Pepper Older Americans Independence Center, and the Geriatrics Research, Education and Clinical Center of the VA Maryland Health Care System, Baltimore, Maryland. For further information about the newsletter and gerontology programs at the University of Maryland, Baltimore, call 410.706.4567, or visit our web site, [gerontology.umaryland.edu](http://gerontology.umaryland.edu)

## CONTRIBUTORS

Reba Cornman  
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Kara Longo  
Marianne Shaughnessy  
Danielle Sweeney

[from page 3] with structured exercise and repetition, a stroke survivor can continue to improve. Even a decade after the stroke, patients can fight back against the disabilities associated with their disease.”

In addition to testing the exercise and robotics programs noted above, the Center has additional goals that include establishing a platform for health professionals to interact with engineers and industry to advance technology of robotics-assisted rehabilitation and its integration with exercise, educating medical professionals with expertise in the design and implementation of similar exercise programs, dissemination of these programs into the community, and finally, the extension of these trials to test effectiveness in individuals with other neurological disability conditions including multiple sclerosis, Parkinson's Disease, traumatic brain and spinal cord injury.

For more information on *The Maryland Center for Exercise & Robotics in Disability and Aging*, please visit our website: <http://www.medschool.umaryland.edu/robotics>. ■

## Annual GGEAR Spring Conferences Reach Health Professionals and Families Throughout the State

The Geriatrics and Gerontology Education and Research Program (GGEAR) is sponsoring a series of conferences throughout Maryland this spring in partnership with many agencies, university programs and organizations serving health professionals and older adults throughout the state. GGEAR will reach well over 2,000 professional providers and family caregivers through the following programs being held from April through June. The conference titles, locations, and co-sponsoring agencies and organizations are also listed below.

April 11, **Protecting and Supporting Vulnerable Adults** with the WMAHEC, Allegany County Dept. of Social Services and other Allegany County based agencies. The program was held in Cumberland.

April 13, **Management of the Geriatric Trauma Patient from the Community to the Acute Care Setting** in Cumberland with WMAHEC as well as the Western Maryland Health System. The program featured Thomas Scalea, MD, Director and Physician in Chief of the R. Adams Cowley Shock Trauma Center, University of Maryland Medical Center

April 27, **The 15th Annual Southern Maryland Caregivers Conference** with the Charles County Department of Community Services and many Southern

Maryland agencies and organizations.

The program was held in La Plata

April 27, **Personality Disorders and Therapeutic Interventions in the Aging Population** with WMAHEC, Hagerstown Community College and Washington County CARES, Inc. The program was held in Hagerstown.

May 24, **Challenges of Mental Health Issues and the Older Adult: Solutions to the Puzzle** with ESAHEC, Johns Hopkins Geriatrics Center, The Mental Health Association of Maryland and the Peter Lamy Center, School of Pharmacy. The program will be in Cambridge, Md.

June 15, **Changing Our Perspective in Providing Quality Care for Persons with Dementia** in Hagerstown, Md. with WMAHEC Alzheimer's Association-Greater Maryland Chapter and Hagerstown Community College.

For further information about upcoming conferences, please use our web based calendar at the Gerontology Programs at the University of Maryland Baltimore web site, [www.gerontology.umaryland.edu](http://www.gerontology.umaryland.edu). For further information, you can write the GGEAR director, Reba Cornman, [rcornman@umaryland.edu](mailto:rcornman@umaryland.edu). ■

## Lamy Center Publishes Chartbook on Medication Use



The Peter Lamy Center for Drug Therapy and Aging, University of Maryland School of Pharmacy is publishing, *A Chartbook of Medication Use by Aged and Disabled Medicare Beneficiaries Across the Spectrum of Morbidity*. Under the direction of the Center's Executive Director Bruce Stuart and funded by the Commonwealth Fund, the Chartbook has been developed to help policy makers and health services researchers better understand the complex relationships between disease burden and medication use. The Chartbook presents detailed information on the breadth, intensity, and persistency of prescription drug use by Medicare beneficiaries prior to the advent of Medicare Part D. The results are designed to serve as empirical benchmarks for evaluating the quality of pharmaceutical care under the new drug benefit.

The Chartbook can be found on the Peter Lamy Center web site, [www.pharmacy.umaryland.edu/lamy](http://www.pharmacy.umaryland.edu/lamy). For further information, you may also call the Lamy Center at 410-706-2434. ■

## Post-Doctoral Fellow Studies Vascular Mechanisms Underlying Effects of Exercise on Glucose Metabolism in Older Adults

**Steven Prior, Ph.D.**, a post-doctoral fellow in the Division of Gerontology Department of Medicine and the Geriatric Research, Education, and Clinical Center (GRECC), is investigating the vascular mechanisms by which aerobic-exercise training increases insulin sensitivity and glucose metabolism, or how the body handles sugar, in older people. "We currently know that aerobic training improves insulin sensitivity and glucose metabolism. In the general sense, this study is investigating the mechanisms underlying this improvement in adults with abnormal glucose metabolism," says Dr. Prior.

Dr. Prior's research interests include exercise physiology and the processes by which exercise improves glucose metabolism by affecting angiogenesis (the generation of new capillary supply within the muscle) and vascular endothelial growth factor (VEGF) expression. Previous research shows that both angiogenesis and VEGF expression are dysregulated in individuals with type 2 diabetes, but these studies did not establish the mechanisms underlying these abnormalities. Dr. Prior states that his "research will examine the mechanisms by which type 2 diabetes causes these abnormalities and how interventions such as exercise training might improve or restore normal angiogenesis in the skeletal muscle of individuals with impaired glucose tolerance or type 2 diabetes."

Dr. Prior's study will be the first to examine the effects of aerobic-exercise training on insulin-regulated angiogenesis and VEGF expression in older adults with impaired glucose tolerance and type 2 diabetes. Training under Andrew Goldberg, M.D. and Alice Ryan, Ph.D., Dr. Prior has collected some promising early data showing that a higher capillary density in type I skeletal muscle fibers is associated with better glucose metabolism.

Each of Prior's study volunteers undergoes clinical tests before and after the exercise training intervention that evaluate cardiovascular risk factors (lipids/cholesterol, blood pressure, heart rhythm by electrocardiogram, diabetes and inflammation), exercise capacity (cardiac fitness), and glucose and muscle metabolism. The intervention includes six months of aerobic-exercise training in the Baltimore VA Medical Center's Senior Exercise Research Center. Initially the training is five days per week before transitioning to three days per week. To enroll in the study, Dr. Prior says a study volunteer needs to be either 20 to 40 years old, or 50 to 75 years old, a non-smoker with a Body Mass Index (BMI) of 18 to 30 kg/m<sup>2</sup>, in general good health, and able to exercise.

Dr. Prior explains that there are many potential benefits for the individuals participating in the study. "We expect the aerobic exercise training intervention to improve the study participants' glucose metabolism through increases in insulin signaling (regulation of glucose levels through the insulin pathway), VEGF expression, and capillary density in the skeletal muscle. Study participants also will improve their cardiac fitness level and reduce their risk factors for cardiovascular disease," says Dr. Prior.

"Understanding the mechanisms by which aerobic exercise training improves insulin sensitivity and glucose metabolism may lead to more effective treatments for individuals with glucose intolerance and type 2 diabetes" says Dr. Prior. Healthy men and women ages 20 to 40 or 50 to 75 who are interested in learning more about the study can contact the GRECC at 410-605-7179 and mention CODE:STX. ■

## SCHOOL OF PHARMACY, PETER LAMY CENTER, DRUG THERAPY AND AGING

**Dr. Linda Simoni-Wastila's** article, "Over-the-Counter Drug Use by Medicare Beneficiaries in Nursing Homes: Implications for Practice and Policy" was selected by the AGS Foundation for Health in Aging, which appeared in the October 2006 issue of the Journal of the American Geriatrics Society (JAGS) as the basis for a new public education resource. This new resource summarizes selected articles from JAGS to create a public education resource. The goal of this new effort by the AGS Foundation for Health in Aging is to help the public better understand the often complicated language of modern medicine, and to help keep older adults and their caregivers updated on cutting-edge research in geriatrics.

Dr. Simoni-Wastila was recently named Graduate Program Director for the Department of Pharmaceutical Health Services Research effective January, 2008.

**Dr. Nicole Brandt** has been selected to receive the 2007 Leadership Award at the American Society of Consultant Pharmacists at ASCP's Geriatrics meeting to be held in Hollywood, Florida from May 21-23, 2007.

## GGEAR

**Reba Cornman**, Director of the GGEAR Program has been elected President of the Maryland Gerontological Association (MGA) for a two year term. Reba is the Program Chair for the upcoming MGA 25th Anniversary Conference, which will take place on June 6. **Denise Orwig, PhD**, Division of Gerontology, Department of Epidemiology & Preventive Medicine continues as the MGA Treasurer for an additional one year term. The MGA is a statewide professional organization which sponsors interprofessional programs in the field of aging.

## SCHOOL OF PHARMACY

**Dr. Mary Lynn McPherson** has received the W. Arthur Purdum Lifetime Achievement Award from the Maryland Society of Health-Systems Pharmacists.

The Purdum Lifetime Achievement Award is the Maryland Society of Health-Systems Pharmacists' highest award, designed to recognize an individual who has made significant or sustained contributions in or for health system pharmacy or has provided influential leadership in the practice of health system pharmacy at the state level. Dr. McPherson is a professor in the Department of Pharmacy Practice and Science.

## ERICKSON SCHOOL OF AGING STUDIES, UMBC

**Dean J. Kevin Eckert** has announced the appointment of three senior faculty joining The Erickson School at UMBC: William Thomas, MD, Judah Ronch, PhD and William Fulmer, PhD.



**Dr. William Thomas** is an international authority on geriatric medicine and eldercare. He currently serves as president of The Center for Growing and Becoming, Inc., a not-for-profit organization dedicated to promoting and

developing constructive, holistic approaches to aging and the care of our elders. He is the founder of The Eden Alternative, a global non-profit organization that is committed to improving the care received by people who live in institutions everywhere. Most recently, Dr. Thomas developed the Green House, a radically new approach to long-term care. In 2005, the Robert Wood Johnson Foundation announced a five year ten million dollar grant that will result in the creation of Green House projects in all fifty states.



**Dr. Judah Ronch** joined Erickson Retirement Communities as VP of Mental Health and Wellness in July, 2004, where he was responsible for developing person-centered strengths based approaches that serve the mental wellness needs of Erickson's residents.

Prior to joining Erickson, Dr. Ronch was Director of Clinical Services at the Miami Jewish Home and Hospital for the Aging, and the founder and Executive Director of LifeSpan Developmental Systems, which for over 25 years created numerous innovative programs of clinical service, research, staff development systems consultation and organizational development to meet the mental health needs of the aging in various parts of the United States. He is the former

Executive Director of the Brookdale Center on Aging of Hunter College, and has been on the faculties of Vassar College, The University of Miami, and Dutchess Community College



**Dr. William Fulmer** served as senior fellow and senior vice president with the Executive Development Center of the Harvard Business School from 1998 until 2002. He also has served on the Harvard faculty both as an Assistant Professor in the 1970's and Visiting Professor in the 1980's.

In addition to his teaching and research activities, Dr. Fulmer has served as a consultant to a variety of corporations and public agencies. His work has been focused in the areas of strategy, service management and quality and continuous improvement. He also has taught in numerous executive development programs throughout the world.

Dr. Fulmer holds Ph.D. and MA degrees from the University of Pennsylvania, a MBA from Florida State University and a BA from Lipscomb University. ■

## STUDENT News

### UMB STUDENT RESEARCH IN THE FIELD OF AGING

*Advances in Aging* is pleased to provide our readers with a sample of the diverse and interesting research work being done by UMB students. This addition provides some examples of the research work pursued by students from the Schools of Nursing and Pharmacy and the Doctoral Program in Gerontology.

### SCHOOL OF NURSING

**Ingrid Pretzer-Aboff's** dissertation research has looked at the feasibility and impact of a restorative care (Res-Care) project designed specifically for individuals with Parkinson's disease (PD) and their caregivers. Res-Care PD is a self-efficacy based

intervention that involves teaching and motivating caregivers to engage in restorative care activities that help to motivate the individual with PD to engage in functional activities and exercise. Conclusions of the study were that Res-Care PD could easily be implemented in the home setting and had a significant effect on increasing caregiver knowledge about restorative care techniques and on strengthening outcome expectations related to exercise, time spent in exercise and physical activity and in improving functional performance in individuals with PD. Dr. Barbara Resnick was the chair of Dr. Pretzer-Aboff's committee.

**Juhee Lee, PhD, RN** completed the study entitled, Quality of Life of Korean Family Caregivers of Older Stroke Patients: Using the Stress and Coping Model in fulfillment of the requirements for her doctorate.

**Dr. Sandra Picot** was Chair of her dissertation committee. Dr. Lee is currently a full-time Instructor at the College of Nursing, Yonsei University. The purpose of

this cross-sectional study of a volunteer sample of Korean family caregivers (N = 147) of community-dwelling stroke patients was to determine factors that influenced their quality of life (QOL). The stress and coping model guided the study. Dr. Lee collected data from family caregivers at outpatient clinics of stroke centers at three hospitals and two home health agencies located in Seoul, Korea and suburban area of Kyunggi-do. The caregivers were an average age 50, mostly women (77.6%), married (78.2%), well educated (80.9%), unemployed (71.4%), and almost an equal number of spouses (43.5%) and adult children and/or their spouses (55%). Feeling high levels of the cultural characteristic of obligation softened the effect of stress on QOL in spouses only. More experienced caregivers (>13 months) than less experienced caregivers (< 12 months) reported higher levels of QOL. Fewer caregiving hours and women caregivers significantly predicted higher levels of QOL. Higher levels of social support were linked with higher lev-

els of QOL. Both caregiver and caregiving situation characteristics are important considerations in assessing the QOL Korean caregivers of stroke patients. The levels of the cultural characteristic of obligation in spouses particularly and social support is important to evaluate. Attempts to limit the number of caregiving hours by employing social support will improve QOL.

Dr. Lee can be contacted at [jhl@yumc.yonsei.ac.kr](mailto:jhl@yumc.yonsei.ac.kr)

## SCHOOL OF PHARMACY

**Tatiana Kondrakhina**, implemented a project called, Screening and Intervening on Medication Related Problems of Older Russian Americans in Baltimore City. Dr. Nicole Brandt, Associate Professor, Geriatric Pharmacotherapy and Dr. Julie Caler, Geriatric Pharmacotherapy resident were Ms. Kodrakhina's preceptors.

Community dwelling older adults were screened for identification of medication related problems by utilizing a medication risk questionnaire during Vial of Life sessions. The program was designed to assist emergency rescue teams in medical treatment in the event that a patient is unable to communicate. The survey was performed during home visits with Senior Friendly Neighborhood community health nurse, Miriam Rossman.

64 patients were screened during the Vials of Life (VOL) Sessions. Even though only 16% of patients acknowledged having difficulty following their medication regimen, many patients had expired medications at home and could not recall how often they take their medications. The patients who had difficulty following their medication regimen were living alone, older than 70 year old and had some co-morbidity related to mental deterioration. Only one patient out of seven was willing to have her/his medications reviewed by a pharmacist.

The translation of medical information into Russian and an explanation of the VOL program were performed parallel with the medication related problems survey. Important medical information about the individual, in English, was placed in a small prescription vial and was stored in the refrigerator. Red stickers on the entry door and the refrigerator help the paramedics to quickly find the critical details necessary to help the patient. This program is crucial for Russian speaking elderly population who cannot communicate with emergency rescue teams in English and are at a high risk for health-related emergency situations. Some of the project's conclusions were:

patients may take more medications in reality than they report during a survey; the process of impairment of memory and mental abilities may be troubling for an older adult with a good level of education and highly intellectual job in the past; many Russian-speaking patients were dismissing their health problems as an inevitable part of aging that does not require medical attention

**Masayo Soto**, a Pharmaceutical Health Services Research doctoral student presented her poster entitled, The Association between Urinary Incontinence and Falls among the Elderly Living in the Community: Cross-Sectional Study Using the Medicare Current Beneficiary Survey at the 2007 American Geriatrics Society conference Student Poster Session & Luncheon. Ms. Soto was one of the students to receive a travel stipend to attend the conference and present her poster.

## DOCTORAL PROGRAM IN GERONTOLOGY:

**Yu (Sunny) Kang** has been working with **Dr. Anthony Tucker**, Center for Health Program Development and Management (CPHDM), UMBC on two projects. Her primary task is to work on the Minimum Data Set (MDS) Data Refinement & Development project that aims at the refinement of the MDS data for facilities in Maryland for calendar years 1999 through 2005; and to provide initial baseline measures to characterize nursing facility service use. Sunny is also the co-author of the research outcomes of the MDS project to be presented in the upcoming 2007 Annual Research Meeting of Academy of Health in Orlando, Florida. In addition, Sunny has been working on the literature review process of the ADL Survey project. The Maryland Department of Health and Mental Hygiene (DHMH), with initial funding from the Center for Health Care Strategies, has sponsored a sample survey to examine the distribution of, and extent to which, Maryland Medicaid recipients who are older adults or adults with disabilities report the need for support for basic activities of daily living (ADLs). The survey is intended as the first phase of a broader research agenda to explore how functional status as measured by ADLs is related to Medicaid resource use over time. In addition, how such measures might be used for rate setting and performance assessment in the context of managed long-term care is being examined.

**Sarah Fogler** has also been working at CHPDM where she is cooperatively working on two Center projects. The first project, which is focused on Maryland Medicaid beneficiaries, is exploring the diagnostic, functional, and social predictors of long-term nursing facility (NF) stays for those under the age of 65. As part of an independent project, Sarah has expanded the study to investigate the relationship between Maryland's population trends and the growth in the Medicaid under-65 NF population. Sarah is also participating in a Center project that is working to determine the future long-term care (LTC) service and program needs for those 65 years and older and individuals with disabilities for the years 2010, 2020, and 2030. Based on the population projection findings, recommendations can be made on how the Maryland can begin to plan for the LTC service and program needs.

**Rebecca Perron** and **Tommy Piggee, Sr.** are gerontology fellows at the Erickson Foundation. They are both involved with the VIVA! program at the Foundation, which is a multi year study examining successful aging within the Charlestown Retirement Community, a CCRC. VIVA! explores physical and psychological functioning, as well as social engagement. Rebecca is also a member of the team that develops the research questions and analysis plan for the data. Tommy's role with VIVA! is centered upon completion of technology-aided, multi-dimensional assessments of adult's physical, psychological and social status that results in an individualized profile with recommendations for sustaining health and wellness.

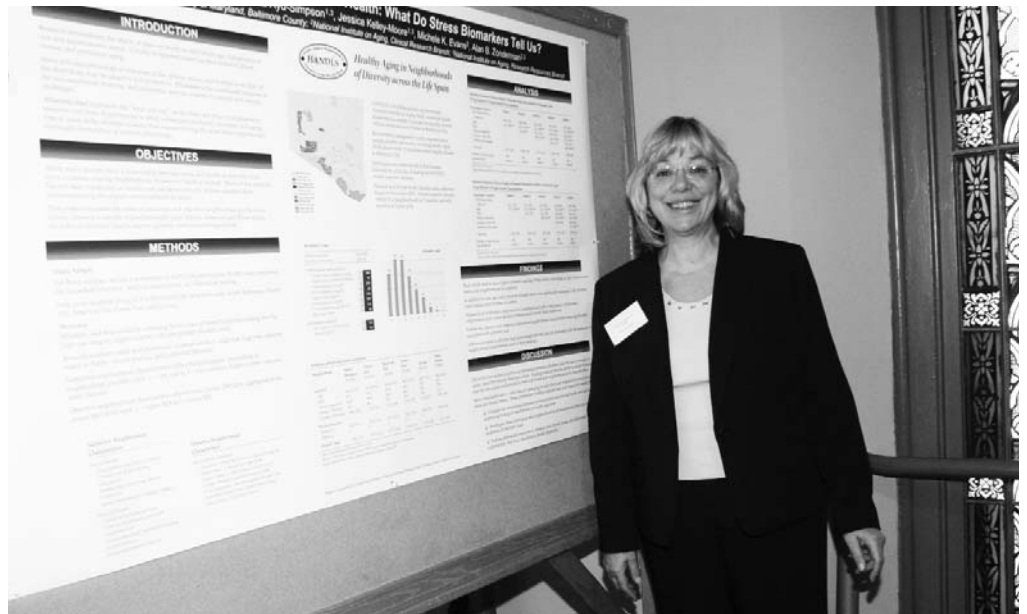
Tommy is also collaborating with **Garrett Falcone**, the Executive Director of Charlestown on a program evaluation of the Drive to Nursing Excellence Project. The projects aim is to demonstrate the benefits of modified pay-for-performance to enhance retention of qualified health care personnel (RN, LPN and PCA) in the long-term care venue. In addition, Tommy is working with **Dr. John Parrish**, Executive Director of the Erickson Foundation, on the Fitness & Function for Falls & Fractures Risk Reduction Program. ■

# The Aging Research—Women’s Health Research Poster Day

The Annual Aging Research and Women’s Health Research Poster Day took place on April 9, 2007 in Westminster Hall at the University of Maryland Baltimore Campus. **Dr. Barbara Sherwin**, James McGill Professor and CIHR Distinguished Scientist McGill University gave the keynote address entitled, “Estrogen and Cognition in Women: An Attempt to Resolve the Controversy.”

35 pre doctoral, post doctoral and junior faculty submitted abstracts and presented their posters this year. Over 150 faculty, students and staff were in attendance for the half day program which concluded with the awards ceremony. This year’s winners were, **Loretta Ayd-Simpson**, Doctoral Program in Gerontology in the pre-doctoral social, behavioral, clinical research category; **Camille Hammond, MD, MPH**, School of Medicine for the post-doctoral/junior faculty social, behavioral, clinical research category and **Mary Holder**, Program in Neuroscience, in the basic science category.

The Annual Poster Day convenes students, faculty and staff from both the University of Maryland Baltimore and University of Maryland Baltimore County campuses involved in aging research and



**First place winner, Loretta Ayd-Simpson, Doctoral Program in Gerontology in the pre-doctoral social, behavioral, clinical research category**

women’s health research and provides a focus on the expertise of both trainees and junior faculty in their respective areas of research. The program is sponsored by the University of Maryland Center for Research on Aging, the University of Maryland Women’s Health Research Group, the

Geriatrics and Gerontology Education and Research Program, the University of Maryland Claude D. Pepper Older Americans Independence Center and the BVAMC Geriatric Research, Education and Clinical Center. ■

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