The Doctoral Program in Gerontology (DPG) is in its 22nd year of “Preparing the Next Generation of Gerontology Scholars.” We are very proud of our 48 graduates working across the country and internationally in government, academic, industry and non-profit settings on behalf of older adults and their families. We recognize our more than 50 affiliate faculty who make our joint, bi-campus program a model of innovative inter-campus collaboration in the field of gerontology.

Research Highlights

PI: Dr. Sarah Holmes
Co-Is: Drs. Barbara Resnick & Beth Galik
Title: Meaningful Activity for Residents with Dementia in Assisted Living
Funding source: Alzheimer’s Association Research Grant (AARG)
Dates: 1/1/22 – 12/31/24

Many persons with dementia experience behavioral symptoms of distress (e.g. resistance to care, agitation) which can be triggered or exacerbated by the physical and social environment. The presence of behavioral symptoms of distress can challenge staff and may lead to the inappropriate use of psychotropic medications. One promising non-pharmacologic strategy for managing these behavioral symptoms is through meaningful activities which involve participation in activities that are tailored to residents’ interests and preferences. Guided by the social ecological model and social cognitive theory, we developed Meaningful Activities for Managing Behavioral Symptoms of Distress (MAC-4-BSD). MAC-4-BSD utilizes a well-established four step approach to help staff engage residents in meaningful activities and includes participation from a stakeholder team and on-site champion. The objective of this study is to test the feasibility and preliminary efficacy of MAC-4-BSD to reduce behavioral symptoms of distress by modifying the environment and empowering staff to facilitate and engage residents in meaningful activities. The MAC-4-BSD intervention will be tested using a cluster randomized trial with a repeated measures design. A total of 100 residents with mild to moderate dementia will be recruited from 4 assisted living communities. Outcomes will be evaluated at baseline, 4, and 12 months. Data analyses will include descriptive analysis and linear mixed modeling. Findings from this study will lay the groundwork for a larger randomized controlled trial to test the effectiveness of MAC-4-BSD for reducing behavioral symptoms and improving quality of life for the growing number of residents with dementia living in assisted living communities.

PI: Dr. Michael Lepore (PI, 20%)
Co-Is: Drs. Holmes S, UMB SON; Kusmaul N, UMBC; Corazzini K, UNH.
Title: Advancing Person-Centered Dementia Care in Low Resource Contexts
Funding Source: Alzheimer’s Association
Dates: 7/1/22 – 5/31/2024

This community-based participatory research study is seeking to improve dementia care in low-resource long-term care contexts. In this study, people living with dementia in long-term care settings, their close relations, and employees of the long-term care settings, including frontline care staff and administrative staff, will participate in three cycles of research about how to collect and share data to support long-term care providers to provide person-centered care and to support people living with dementia in long-term care settings to have a good quality of life. Four long-term care settings will participate, including two nursing homes and two assisted living communities, two of which will be located in the mid-Atlantic and two in the Northeastern United States. Participants from the four sites will first engage in semi-structured interviews, then a subset of interview participants will participate in workshops for co-designing data collection and data sharing protocols, and finally a subset of participants will engage in a final round of interviews to review and assess the protocols that are developed over the course of the project. Findings will be synthesized in an implementation framework to be used within the study sites, as well as in other long-term care sites, to support person-centered dementia care and quality outcomes among people living with dementia in long-term care settings.
PI: Dr. Jennifer Albrecht  
Co-I: Drs. Addison, Badjatia, Grattan, Gruber-Baldini, Kozar, Liang, Magaziner, Orwig, Wickwire  
Title: Recovery among Older Adults Following Head Injury  
Funding source: National Institute on Aging  
Dates: 7/1/22-6/30/27

Traumatic brain injury (TBI) is a common, fall-related injury that results in over 123,000 hospitalizations, 485,000 emergency department visits, and 21,000 deaths annually among adults aged 65 years and older. TBI increases risk of Alzheimer’s disease and other health outcomes (e.g., psychological distress, sleep quality). Yet, despite its very large public health impact, little is known about recovery from TBI among older adults. The objective of the proposed research is to gain an in-depth understanding of recovery following TBI among older adults and the factors that influence it. To achieve our objective, we propose to conduct a prospective cohort study of 250 patients aged 65 years and older and treated for mild TBI at the R Adams Cowley Shock Trauma Center with follow-up at 2 weeks and 3, 6, and 12 months to complete three Specific Aims: 1) Assess recovery of physical functioning and identify predictors of poor recovery; 2) Assess recovery of cognitive and psychological functioning and sleep quality and identify predictors of poor recovery; 3) Identify interactions between recovery trajectories. The significance of the proposed research is that it will identify unique recovery patterns and factors that impact the course of recovery in key functional domains following mild TBI, the most common type of TBI among older adults. This work will generate new knowledge that will guide targeted treatment efforts and inform future development of strategies to optimize recovery following this common fall-related injury among older adults.

MPIs: Drs. Denise Orwig and Patricia Dykes  
Co-I: Drs. Jay Magaziner, Jason Falvey, and Elizabeth Parker  
Title: Effectiveness of a Multimodal Intervention for Transitions of Care after Lower Limb Fracture  
Funding source: Patient-Centered Outcomes Research Institute (PCORI)  
Dates: 11/2022-10/2027

Older adults with lower limb fractures receive acute care and surgery in hospital and are discharged within 3–5 days to a skilled nursing facility (SNF) for rehabilitation where care is highly heterogenous. The length of stay in SNF can be 3-12 weeks and offers the ideal setting for initiating evidence-based interventions across the clinical care team and allowing for targeted education for the patient and family. We propose to introduce Osteoporotic fracTure preventION System (OPTIONS), an integrated multi-modal intervention, with clinical decision support (CDS), for providers, patients, and care partners, to improve uptake of tailored exercise, healthy nutrition, and bone-enhancing medications. We focus on those who were community-dwelling at the time of fracture entering SNFs for rehabilitation and their transitions back to the community. CDS is needed to quickly and easily guide clinicians to the most effective strategies for an individual patient and engage patients and their caregivers in decision-making to ensure that the evidence-based interventions are routinely implemented and sustained in clinical practice within the SNF and across transitions in the community. We will partner with a large integrated healthcare network with SNFs across the United States to conduct a matched pair cluster randomized controlled trial (SNF as unit of randomization). The purpose of this project is to determine the effectiveness of OPTIONS to improve function and quality of life by increasing uptake and adherence of the 3 evidence-based clinical interventions. The patient-reported outcomes will be collected from 1320 patients across 24 SNFs.

MPIs: Drs. Nancy Kusmaul and Brandy Wallace  
Title: Trauma-Informed Care in Nursing Homes  
Funding Source: The Oregon Community Foundation  
Dates: 2/1/21-2/1/23

The long-term goal is to establish effective trauma-informed care (TIC) implementation strategies for nursing homes. Currently there is no single accepted strategy for implementing TIC in nursing homes and that researchers, administrators, and regulators have little understanding of TIC and its impacts within nursing homes. This project will create a replicable tailored TIC approach for nursing homes (NHS). We have designed a TIC educational and coaching curriculum and are working with two nursing homes in each year to implement TIC, identifying and addressing barriers to this organizational change.
Research Highlights continued:

**MPIs:** Drs. Ann Gruber-Baldini and Jay Magaziner  
**Co-Is:** Drs. Orwig, Latham, Schmalzle, Reisner, Parker  
**Title:** Behavioral Activation Intervention for Persons Aging with HIV  
**Funding source:** UM-OAIC Supplement, NIA  
**Dates:** 09/05/22—06/30/23

This administrative supplement will test the feasibility and acceptability of a brief (12 week) individualized, Behavioral Activation program focused on decreasing loneliness and increasing social engagement, that will be augmented with a program to increase home exercise and address poor nutrition among persons aging with HIV. It will be delivered by remote coaches. Recruitment will include those ages 50+ with HIV from the UM THRIVE program and other HIV centers in Baltimore as necessary. This work will be accomplished in three stages: Stage 1: We will start with community engagement strategies, such as focus groups with persons aging with a HIV diagnosis and clinical providers, to tailor the intervention. A community engagement team will provide feedback on preferences for delivery mode (telephone, tablet, home, and/or at a community center), recruitment strategies and brochures, measures, other study materials, inclusion of the physical activity and nutrition modules. Stage 2: We will work with HIV clinical and research experts in exercise, nutrition, and psychological functioning to tailor the content of the material and resources for the remote coaches in order to meet the needs of PAWH. Stage 3: Following the community engagement and tailoring the intervention for PAWH, we will pilot test feasibility acceptability with 10 persons ages 50+ living with a HIV diagnosis. This study will test the feasibility of a much-needed intervention to improve functioning and health outcomes among a vulnerable group of older adults. It is a single-group unblinded feasibility study to explore a new intervention to support older people aging with HIV. If this intervention appears to be feasible, acceptable, and to show preliminary evidence of efficacy, we will look to evaluate it in a phase III efficacy trial.

**PI:** Dr. Jason Falvey  
**Mentors:** Drs. Magaziner, Guralnik, Shardell, and Mullins  
**Title:** The ENRICH Study: Engaging Community and Municipal Stakeholders to Improve High Quality Aging in Place after Hip Fracture  
**Funding source:** NIA  
**Dates:** 9/30/21-8/31/26

The goal of ENgaging community and municipal seRvICes to promote high-quality aging in place after Hip fracture (ENRICH) is to help older adults more meaningfully participate in community activities to improve the quality of aging in place. To tailor ENRICH for Baltimore, this project will 1) gather information on which factors (e.g. housing) most strongly impact the number of healthy days spent at home after hip fracture, using Medicare claims data linked with US Census Bureau data; 2) use this data to guide interviews with patient and clinician stakeholders to elucidate meaningful adaptations of ENRICH; and 3) pilot test the effect of ENRICH on life space mobility with 24 older hip fracture patients living in economically deprived neighborhoods.

Podcast Episode! Check out and share the fantastic podcast episode spotlighting our UMB/UMBC Doctoral Program in Gerontology on Retrieving the Social Sciences [https://www.podbean.com/pu/pblog-4zwd3-a6a614](https://www.podbean.com/pu/pblog-4zwd3-a6a614). It features segments with our DPG co-director: Dr. John Schumacher; current graduate students: Min-Kyoung Park; Rachel McPherson; Jenn Kirk; and, alumni: Dr. Roberto Millar and Dr. Sarah Holmes. Listen to the amazing work being done.
Faculty News
A selection of grant funding, awards, and publications are reported for our faculty affiliates.

Awards and Kudos:

Dr. Jason Falvey was recognized as a 2022 Health in Aging Foundation New Investigator Awardee by the American Geriatrics Society.

Dr. Falvey also earned the Jack Walker Award for best publication in Physical Therapy, American Physical Therapy Association.

Dr. Sarah Holmes received the Gerontological Society of America Douglas Holmes Emerging Scholar Award for the paper titled, “Care Transitions Among Medicare Nursing Home Residents with and without Antipsychotic Medication Use” in November 2021.

Dr. Holmes also received the Breaking Science Award at the 2022 Annual Meeting for AMDA: Society for Post-Acute and Long-Term Care Medicine; Zarowitz BJ (presenter), Jain P, Holmes S, Qato DM, Carab jal-Johnson A, Fleming SP, Lucas JA, Desai A, Brandt N, & Wastila L. Impact of nursing home factors on antipsychotic use in residents before and after the implementation of the antipsychotic reduction initiative.

Dr. Nicole “Jennifer” Klinedinst was appointed co-director of the Biology and Behavior Across the Lifespan (BBAL) Organized Research Center in the University of Maryland School of Nursing.

Dr. Nancy Kusmaul became president of the Association for Gerontology Education in Social Work (AGESW).

Drs. Nancy Kusmaul and Brandy Wallace received a Supplement for Undergraduate Research Experiences (SURE) Award from UMBC to support our Trauma-informed care in nursing homes project currently funded by the Oregon Community Foundation.

Dr. Amanda Lehning has been invited to continue serving on the AARP Long-term Services & Support State Scorecard National Advisory Panel for the 5th LTSS Scorecard to be released in the Fall of 2023.

Dr. Michael Lepore was named co-director of the Center for Health Equity and Outcomes Research (CHEOR) in the University of Maryland School of Nursing.

Dr. Lepore will also be joining the ICTR team as associate director within the ICTR Community and Collaboration Core.

Dr. Eun-Shim Nahm was named Associate Dean for the Doctor of Philosophy (PhD) program in the University of Maryland School of Nursing.

Drs. Karon Phillips and Sarah Chard have been named The Gerontological Society of America fellows. This is the highest level of recognition in the GSA professional organization.

Dr. Barbara Resnick was recognized as Distinguished University Professor from UMB. The title of Distinguished University Professor is the highest appointment bestowed on a faculty member at UMB. It is a recognition not just of excellence, but also of impact and significant contribution to the nominee’s field, knowledge, profession, and/or practice.

Dr. Resnick also received the 2021 Ada Sue Hinshaw Award from the Friends of the National Institute of Nursing Research. Recipients have a substantive and sustained program of science that afford them recognition as a prominent senior scientist with a trajectory of research that has transcended health and/or related disciplines and where outcomes have led to improved health and well-being of one or more populations.
Faculty News continued…

**Promotions:**

Drs. John Schumacher and Taka Yamashita were promoted to Professor.

Dr. Michael Lepore was awarded tenured professor.

Dr. Nancy Kusmaul was promoted to Associate Professor.

**Books:**


**Book Chapters:**


**Faculty Publications (selected)**


Faculty Publications continued...


Faculty Publications continued...


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Hema Ramamurthi (left): Epidemiology Track
Hema's interest in aging and aging-related research stems from her experience interacting with participants of several epidemiological and interventional studies spanning a wide range of topics from elder abuse, chronic disease management and progression of infectious diseases such as HIV. Following her training as a physician in India, Hema came to the United States and has pursued a career in academic-community based research at the University of California, Los Angeles, Charles R. Drew University, and currently at the Bloomberg School of Public Health, Johns Hopkins University. Hema is interested in the impact of digitization and ageing.

Jaminette Nazario (center): SCB Track
Jaminette's interest in the older adult population began as a teenager when she saw that a large part of this population needed public transportation to get to their medical appointments or destinations. In her Master of Public Health in Gerontology practice, she had the opportunity to investigate the digital literacy and service providers in activity centers and multiple services in Puerto Rico where she was able to observe the existing needs of service providers and how it affects the services offered to older adults. Jaminette's research interest is focused on older adults living in the community and who have limited resources to achieve a healthy and active old age.

Yoon Chung Kim (right): Epidemiology Track
Yoon's interest in the aging population led her to investigate the mental health of Korea's aging population at Seoul National University, South Korea. She continued to pursue her studies in the Aging & Health program at Georgetown University with a concentration in Healthcare Economics and Policy and Johns Hopkins Bloomberg School of Public Health in the Department of Mental Health. Her current research interests include social isolation, social engagement, sleep, cognition, and mental health of older adults. She also has years of experience in international finance and counseling psychology.
**Student Awards**

Jocelyn Brown was awarded the Gerontology Early Career Development Award.

Rachel McPherson received this year's Derek Gill Memorial Fund Award. This award is given each semester to a student in the Master's program in Applied Sociology based on academic performance (as measured by GPA) and contribution to the department or community. https://saph.umbc.edu/awards/

Jenn Kirk received a summer fellowship award for her dissertation research from Mathematica. https://www.mathematica.org/.../summer-fellows-projects

Rhea Mehta won the Medical and Graduate Student Achievement Award for the abstract she submitted to the American College of Rheumatology conference. This award recognizes outstanding medical and graduate students for significant work in the field of rheumatology.

Donnette Narine won 2nd place for her paper on Volunteering Educational Attainment and Literacy Skills Among Middle-Aged and Older Adults by Racial/Ethnic Groups in the US at SGS 2022.

Shalini Sahoo was awarded an SGS Travel Award.

Nicole Viviano is funded by an ORISE Fellowship within HRSA in the HIV/AIDS Bureau (HAB) in the Division of Policy and Data (DPD), specifically in the Data Management and Analysis Branch (DMAB).

**Apply for the Costa Rican Fellowship**

The Alicia and YaYa Global Fellowship in Aging Research is a collaborative effort between the University of Maryland Baltimore (UMB) Graduate School and the University of Costa Rica (UCR), San Jose to recognize and support outstanding pre-doctoral and/or post-doctoral students pursuing aging research and to reinforce diversity in aging research. https://www.graduate.umaryland.edu/AliciaYaYa/

**Student Publications**


Student Publications continued


Student Conference Presentations


Cassatt, S & Parker E. (2022, March). A Pilot Study To Evaluate The Development And Implementation Of A Virtual Nutrition Education Program In Older Veterans”, Graduate Student Research Day UMB.


McPherson, R., Resnick, B., & Galik, E. (2021, November). The Influence of Staff-Resident Interactions on Resilience to Care Behavior in Assisted Living [Poster presentation]. Gerontological Society of America, online.


Visit us at GSA: Booth #113
Alumni News

Presentations:


Heather Mutchie was the invited speaker at the Academy of the American Physical Therapy Association Geriatrics Journal Club to discuss the Four Square StepTest paper.

Podcasts:

Laura Girling Fitzpatrick was interviewed in UMBC The Center for Social Science Scholarship podcast. Learn about her research on people with dementia in the community. https://www.podbean.com/pu/pbblog-4zwd3-a6a614

Tara McMullen, co-led a special series for the Journal of the American Geriatrics Society (JAGS) that focuses on the IMPACT Act of 2014 (for the Centers for Medicare and Medicaid Services). This special series focuses on the work to standardize data elements for Medicare (eight papers in total). https://agsjournals.onlinelibrary.wiley.com/.../jgs.17644

Awards:
Heather Mutchie was awarded the 2022 Judith D. Tamkin Scholarship to attend the USC Judith D. Tamkin Symposium on Elder Abuse.

Job updates:

Israel Cross is now with the Health Resources and Services Administration (HRSA).

Heather Mutchie is now a post-doctoral fellow at Purdue University School of Nursing working with Adult Protective Services and Financial Exploitation.

Laura Frazier is an Institutional Research Analyst at St. Mary’s College of Maryland. She also teaches undergraduate gerontology/social sciences classes at UMGC and HCC on a part-time, contractual basis.

Laura Girling Fitzpatrick is now an Assistant Professor in the Department of Health Sciences in the Gerontology major at Towson University.

Iona Johnson is recently promoted to Assistant Provost for Diversity & Inclusion for Academic Affairs at Towson University.

Publications (selected):


Men die at a higher rate than women out to two years after a hip fracture. The number of hip fractures among men is expected to increase over the next 30 years with potential sex differences in long-term trajectories of recovery. Therefore, Aim 1 assessed whether male sex was a significant risk factor of all-cause and infection-specific mortality after hip fracture; Aim 2 determined if sex moderated the association between physical performance at 2 months post-fracture and mortality; and Aim 3 evaluated the mediating role of depressive symptoms (at 2 months post-fracture) on the association between TNF-α and mortality and if sex moderated the inflammation-depressive symptoms-mortality link.

Data came from Baltimore Hip Studies (BHS) 7th cohort (168 men, 171 women) (2006-2011) with recruitment in eight hospitals in the BHS network. Women were frequency-matched (1:1) to men on hospital and timing of admission. Cox proportional hazard models evaluated associations between sex and mortality (Aim 1) and the moderating effect of sex between physical performance measures and mortality (Aim 2). Interaction of time with sex and physical performance measures was successively added in the Cox models to determine the time-varying association of sex with mortality (Aim 1) or to determine the time-varying association of physical performance measures with mortality (Aim 2). An Aalen additive model was created and later stratified by sex to assess the mediating effect of depressive symptoms in the association of TNF-α with mortality (Aim 3).

Participants were average age of 80 years and the median follow-up was 4.9 (Interquartile Range=2.3-8.7) years. Men had significantly higher all-cause [Hazard Ratio (HR)=2.31, 95% confidence interval (CI) 2.02-2.59] and infection-specific mortality [HR=4.43, CI 2.07-9.51]. A one-unit improvement in each physical performance measure was associated with a decrease in mortality [SPPB (HR=0.91, CI=0.83-0.98); gait speed (in meters/second) (HR=0.98, CI=0.97-0.99); and grip strength (in kg) (HR=0.95, CI=0.93-0.98)], but the associations did not differ by sex. TNF-α had stronger association with mortality among men compared to women; there were 161 (95%, CI=36-286) and 16 (95%, CI=-58-89) additional deaths in men and women, respectively in the 3rd TNF-α tertile compared to the 1st tertile. Depressive symptoms did not mediate the association of TNFα and all-cause mortality in either sex.

Results show higher long-term mortality in men and that infection and elevated acute TNFα levels may play a role in the sex difference.