EMERGING NUTRITIONAL INTERVENTIONS FOR AGE-ASSOCIATED CELLULAR DECLINE
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Aging is associated with a progressive decline in cellular health leading to dysfunction in organs with a high metabolic demand. A key feature of age associated cellular decline is impairment of mitochondrial quality control pathways such as mitophagy. Deficits in optimal functioning of these pathways results in a compromise in cellular bioenergetics that ultimately leads to mitochondrial dysfunction. Promising nutritional interventions have emerged that boost mitochondrial health such as nicotinamide riboside (vitamin B3 precursor) and Urolithin A (gut metabolite of compounds found in pomegranates), that act via different mechanisms of action to improve overall mitochondrial health. Recent literature on the evidence behind these interventions will be presented and discussed during this symposium. We will also share recent clinical evidence from double-blind placebo-controlled studies with Urolithin A. Our results suggest that nutritional interventions such as Urolithin A are promising approaches that can be employed to manage age associated cellular decline.

SESSION 7100 (SYMPOSIUM)

SUPPORTING PEOPLE WITH DEMENTIA IN THE COMMUNITY: OCCUPATIONAL THERAPY SERVICE AND REIMBURSEMENT INNOVATIONS
Chair: Michael Lepore
Co-Chair: Erin Long
Discussant: Richard Fortinsky

The wide range of services needed to support a safe and quality life among people living with dementia at home is growing and extends beyond the bounds of traditional reimbursement models. Within the context of a health care system that is not designed to reimburse for these types of services, federal grants from the Alzheimer’s Disease Programs Initiative (ADPI) funded by the Administration for Community Living (ACL) have supported the delivery of home- and community-based services (HCBS) for people with dementia and their care partners with a pragmatic emphasis on sustainability, such as establishing sustainable reimbursement pathways. Drawing lessons from ACL’s ADPI program and from the Health Resources & Services Administration Geriatric Workforce Enhancement Program and Geriatrics Academic Career Award program, this symposium examines opportunities and strategies for providing services to people living with dementia in the community and highlights occupational therapy as a valuable dementia care service that has potential for sustainable delivery and opportunities for professional expansion. Papers address needed workforce development for delivering HCBS to diverse populations living with dementia and examine occupational therapy roles in delivering HCBS to persons with dementia and their care partners. Additionally, papers examine the implementation and outcomes of evidence-based occupational therapy and interprofessional interventions for persons living with dementia in the community. Reimbursement mechanisms for occupational therapy services delivered to people with dementia in the community are described. Discussion addresses how these innovative interventions and reimbursement mechanisms align with the recent surge of National Institute on Aging funding for pragmatic trials.

OCCUPATIONAL THERAPY FOR PEOPLE LIVING WITH DEMENTIA IN THE COMMUNITY: WORKFORCE DEVELOPMENT OPPORTUNITIES
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Establishing a workforce capable of delivering evidence- and team-based HCBS for the growing population impacted by dementia is of growing public health importance. Occupational therapy (OT), in collaboration with other disciplines, offers promise for supporting people with dementia to live well at home. However, neither uptake of team-based programs for people with dementia nor availability of providers who work in teams to support people with dementia are well understood. We reviewed information from three federal programs to improve understanding of team-based workforce development needs and opportunities. Findings indicate that interprofessional evidence-based interventions for people with dementia are increasingly implemented but geographically limited and development of the OT workforce’s dementia capability is nascent in interprofessional/interdisciplinary training. OT is a key profession delivering evidence-based HCBS for people with dementia, but substantial opportunity exists for workforce development, including education, training, financing, recruitment, retention, care coordination, and translation and implementation of effective care.

POST-DIAGNOSTIC SUPPORT AND OCCUPATIONAL THERAPY PROGRAM FOR COMMUNITY-BASED DEMENTIA SERVICES
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Service gaps and the absence of a clear-cut care/symptom management pathway for people recently diagnosed with dementia and their family carepartners motivated LiveWell Dementia Specialists to implement a multi-service post diagnostic support program including three occupational therapy (OT) interventions. Program services include an education series on ‘Resilient Living with Dementia’, family coaching and topical education sessions, and OT services including Care of Persons with Dementia in their Environments (COPE), Skills2Care®, and Home Based Memory Rehabilitation. Program services promote adoption of adaptive strategies and action steps to increase carepartner capacity and enhance quality of life among people with dementia. Participants complete assessments at baseline, program completion, and 4- and/or 10-month follow-up. Carepartners
show improvements in dementia knowledge (mean baseline score = 24.6, 4-month = 26.0) and preparedness for caregiving (mean baseline score = 18.1, 4-month = 21.9). Program elements and adaptations of COPE for real world practice are discussed.

MEASURING IMPACT AND SUSTAINABILITY OF EVIDENCE-BASED DEMENTIA CARE TREATMENT IN THE COMMUNITY
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Through a collaborative agreement with the Administration for Community Living, Memory Care Home Solutions translated the evidence-based program (EBP) Care of Persons with Dementia in their Environments (COPE) into community practice as a covered benefit through Medicare and commercial health insurance for people living with dementia. While many studies have demonstrated the efficacy of family-centered behavioral interventions for this population, few of these interventions have been translated from academic studies into successful community practice. This session will describe the process of translating an EBP into community practice utilizing social work and occupational therapy interventionists with a diverse population of people living in both urban and rural areas of Missouri and Illinois, including modifications required and lessons learned in rural service delivery. Attendees will gain an understanding of the translation process, differential treatment outcomes for people living with dementia and care partners and Medicare billing mechanisms for sustainability.

OCCUPATIONAL THERAPY INNOVATIONS IN HOME AND COMMUNITY PRACTICE FOR PEOPLE LIVING WITH DEMENTIA
Catherine Pierrot,1 and Scott Trudeau,2 1. Thomas Jefferson University, Ardmore, Pennsylvania, United States, 2. American Occupational Therapy Association, Bethesda, Maryland, United States

Most Americans with dementia live at home and families are commonly responsible for overseeing the daily activities of the person with dementia. Families require support, education, and skill-building to manage caregiving responsibilities. Occupational therapist are ideally suited to teach care partners tailored strategies for obtaining the “just right fit” between the capacities of the person and the demands of the environment, thus reducing behavioral symptoms, optimizing function and safety and enhancing well-being. Care of Persons with Dementia in their Environments (COPE) is an evidence-based intervention designed to address these outcomes. Over three phases, the occupational therapist employs a problem-solving method to identify strategies that address caregiver-reported difficulties related to managing daily activities, behavioral challenges and other caregiver concerns. This presentation describes the development and implementation of COPE highlighting the distinct approaches of occupational therapy in delivering home- and community-based services to persons living with dementia and their care partners.

SESSION 7105 (SYMPOSIUM)
THE AGING BRAIN: CROSSROAD OF NORMAL AGING AND DEMENTIA
Chair: Qu Tian
Discussant: Luigi Ferrucci

The functional consequences of the aging brain include several aspects of physical and cognitive decline that ultimately cause loss of mobility and dementia. Although in certain individuals, the cognitive and physical correlates of the aging brain occur in parallel, others show decline in one of these functional parameters. Underlying mechanism of this complex process that lead to different manifestations is not well understood. Proposed mechanisms include brain structural changes, tau pathology, specific white matter degeneration, metabolic derangement mostly including lipids metabolism and others. This symposium aims to address the complexity of the aging brain by showcasing studies that span the continuum from normal aging to dementia using data from the Baltimore Longitudinal Study of Aging (BLSA). The wealth of neuroimaging and phenotype data from the BLSA provides the unique opportunity to investigate neural substrates and predictors of aging phenotype, and mechanisms of age-related neurodegeneration and pathology, such as dementia, and loss of mobility. First, we identify multimodal neuroimaging predictors of important aging phenotypes of gait decline (Sargent/Tian) and memory decline (Bilgel). Second, using advanced quantitative MRI technology, we investigate underlying mechanisms of age-related white matter degeneration through potential oligodendrocyte metabolism (Bouhrara). Third, we demonstrate unique cognitive and neuroimaging profiles of dual memory and gait decline (Tian) and neural substrates for bile acids, the primary cholesterol breakdown products (Varma) in relation to dementia. We seek to generate discussions of mechanisms of the aging brain that connect the age-related phenotypes, such as decline of mobility and cognition, to the development of dementia.

COGNITIVE AND NEUROIMAGING PROFILES OF INDIVIDUALS WITH DUAL DECLINE IN MEMORY AND GAIT
Qu Tian,1 Susan Resnick,1 Christos Davatzikos,2 Stephanie Studenski,1 and Luigi Ferrucci,1 1. National Institute on Aging, Bethesda, Maryland, United States, 2. University of Pennsylvania, Philadelphia, Pennsylvania, United States, 3. University of Pittsburgh, Pittsburgh, Pennsylvania, United States

Across 6 aging cohorts we showed that dual decline in memory and gait speed was associated with increased risk of dementia compared to memory or gait decline only. We now characterize dual decliners. Using longitudinal BLSA data, we examined associations of phenotypic groups with changes in cognition, depressive symptoms, and brain volumes in areas important for cognitive (dorsolateral prefrontal, medial temporal) and motor functions (precentral gyrus, striatum, thalamus, anterior cingulate cortex) using linear mixed effects models (usual agers=reference), adjusting for covariates. Compared to usual agers, dual decliners had faster decline in card rotation score, greater increase in CES-D, and greater atrophy in thalamus and anterior cingulate cortex. Rates of change in these parameters did not differ among the other