measure physical performance; total scores ranged from 0, not attempted, to 12, the best). A logistic model comparing community-dwelling older adults going out most days (18.3%), some days (10.3%), or rarely/never (3.4%) to those going out every day found ORs of 0.85, 0.70, and 0.58 respectively (all p<0.0001) for a one-unit increase in SPPB score. Interdisciplinary teams can use findings to assess disabled community-dwelling older adults' frequency of going outdoors. Implications for interventions to assist with increasing times leaving the home (e.g. mobility devices, caregiver assistance) will be discussed.

### PROFILE OF OLDER ADULTS WHO RECEIVED WOUND CARE BY A FAMILY CAREGIVER: THE NHATS-NSOC 2017

Zachary Hathaway, Janeway Granche, Martha Coates, Justine Sefcik, Michael Neidrauer, Peter Lewin, and Rose Ann DiMaria-Ghalili, *Drexel University, Philadelphia, Pennsylvania, United States*

A gap in knowledge exists related to the sociodemographic and health characteristics of older adults receiving wound care from a family caregiver in the home. We created a cohort (N=992) of older adults from NHATS who lived in the community or residential care (non-nursing home) and had a family caregiver complete the NSOC question "provides help with skin care related to wounds or sores". Approximately one third (32%) of these older adults received wound care from a family caregiver. These older adults were more likely to be men, live with others, have lower levels of physical function, be malnourished (OR = 1.63 [95% CI = 1.02-2.60]), and have inflammation (hsCRP > median 1.89), P < .05. These findings can inform the needs of older adults receiving wound care from a family caregiver and lead to development of additional supports for caregivers (e.g., multicomponent interventions).

## SESSION 7210 (SYMPOSIUM)

### RESERVE AND HEALTHY AGING

Chair: Cynthia Felix

Co-Chair: Briana Sprague

In line with the GSA 2020 Annual Scientific Meeting theme of "Turning 75: Why Age Matters", our symposium highlights the fact healthy aging is relevant to maintaining reserve- be it brain/cognitive reserve or physiological reserve. Even among older adults 75 or older, continuing to practice healthy aging habits, helps with reserve. In this symposium, Drs. Felix and Carlson discuss how positive neuroplastic processes such as social engagement and social volunteering may aid in brain/cognitive reserve. Dr. Lin discusses how negative neuroplastic processes such as hearing loss may hamper the same. The "use-it-or-lose-it" hypothesis may be a common pathway in effecting brain reserve, regardless of whether the inputs are social or sensory stimuli. Physiological reserve is also important in aging, and Dr. Sprague talks about energy and frailty, with frailty being an accelerated decline of physiological reserve. While the studies presented are from older adult populations, reserve often takes a lifetime of effort to build and maintain. The symposium speakers present several hypotheses such as brain reserve, cognitive reserve, cognitive load, information degradation, sensory deprivation and frailty. An application of these concepts, would help older adults practice aging habits that promote reserve, into advanced old age, at individual and community levels. Brain Interest Group Sponsored Symposium

### GREATER SOCIAL ENGAGEMENT AND GREATER GRAY MATTER MICROSTRUCTURAL INTEGRITY OF AGING ADULTS

Cynthia Felix,[1] Caterina Rosano,[1] Xiaonan Zhu,[1] Jason Flatt,[2] and Andrea Rosso,[1] *1. University of Pittsburgh, Pittsburgh, Pennsylvania, United States, 2. University of Nevada, Las Vegas, Las Vegas, Nevada, United States*

Social engagement reflects habitual social roles in aging adults and may protect against dementia. Cross-sectional associations of social engagement (SE) index with gray matter (GM) microstructure was studied in regions of interest relevant to social cognition among community-dwelling older adults [n=293, mean age: 82.8 years (SD: 2.8), 43% males] using linear regression models. Greater SE was significantly related to lower mean diffusivity (MD) (greater GM microstructural integrity) [shown as standardized estimate (p-value)] in: left middle frontal gyrus-orbital part: -0.168 (0.005), left caudate nucleus: -0.141 (0.02), left temporal pole-middle temporal gyrus: -0.136 (0.03), right middle frontal gyrus: -0.160 (0.006), right superior frontal gyrus-orbital part: -0.187 (0.002), right middle frontal gyrus, orbital part: -0.124 (0.04), adjusted for demographic attributes. Associations were robust to adjustment for hearing or ADL difficulty. Findings were generally stronger in females than in males. Social engagement may prevent GM integrity loss and build brain reserve in dementia-related regions. Part of a symposium sponsored by Brain Interest Group.

### SELF-REPORTED ENERGY TRAJECTORIES PREDICT ADVERSE HEALTH OUTCOMES IN OLDER ADULTS

Briana Sprague,[1] Xiaonan Zhu,[2] Rebecca Ehrenkranz,[1] Qu Tian,[3] Theresa Gmelin,[1] Nancy Glynn,[1] Andrea Rosso,[4] and Caterina Rosano,[1] *1. University of Pittsburgh, Pittsburgh, Pennsylvania, United States, 2. University of Pittsburgh Graduate School of Public Health, Pittsburgh, Pennsylvania, United States, 3. National Institute on Aging, Bethesda, Maryland, United States, 4. School of Public Health, University of Pittsburgh, Pittsburgh, Pennsylvania, United States*

Declining energy may indicate homeostatic dysregulation and predict adverse health outcomes. We hypothesized that declining energy would predict greater frailty (1-10), greater mortality, and faster mood (CES-D) and cognition (3MS)

decline over time. This observational cohort studies included 2,443 older adults (mean age=74.6, 62.5% White, 47.8% men) from the Health ABC Study with up to eight years of data. Energy was assessed using a single-item question about prior month's energy (baseline mean=6.7, SD=1.7, range=0–10, lower=less energy). We used linear mixed models to create energy change scores (mean=-.07 points/year, SD=.05, range=-0.32-0.21, negative=decreased energy). In regression models adjusting for baseline outcome performance and energy and demographics, declining energy predicted greater frailty (β=-2.72, 95%CI = -3.39,-2.06), greater mortality (hazard ratio=.07, p<.001), and faster CES-D (β=-.93, 95%CI=-1.10,-0.75) but not 3MS decline. Energy changes are easy to assess and predict clinically-relevant outcomes. Future work should consider mechanisms of declining energy on disability-related outcomes. Part of a symposium sponsored by Brain Interest Group.

### SOCIAL VOLUNTEERING IN AGING ADULTS INCREASES REGIONS OF THE AMYGDALA AND CORRELATES WITH ENHANCED GENERATIVITY

Michelle Carlson, *Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, United States*

The Brain Health Study (BHS) of the Baltimore Experience Corps Trial (BECT) examined whether a randomized, controlled trial of an intergenerational social volunteer program, entitled Experience Corps, increased subregions of the amygdala related to socioemotional memory and risk for Alzheimer's disease in aging adults. We further assessed functional correlates of these intervention-related changes and changes in aging adults' developmental need to be generative, or, to give back to the well-being of others. The BHS simultaneously randomized 112 men and women (59 intervention; 53 control) within BECT to evaluate intervention impact on biomarkers of brain health at baseline and annual follow-ups during the two-year trial. Intention-to-treat analyses revealed program-specific increases in the shape of the centromedial and basomedial regions of the left amygdala (p's≤0.05 adjusted), which were correlated with increases in generativity (p's =0.06). Meaningful social engagement buffered amygdalar declines important to preservation of emotionally salient memory and risk for dementia. Part of a symposium sponsored by Brain Interest Group.

### HEARING LOSS IN OLDER ADULTS: IMPLICATIONS FOR COGNITIVE LOAD AND BRAIN STRUCTURE AND FUNCTION

Frank Lin, *Johns Hopkins University School of Medicine, Baltimore, Maryland, United States*

Age-related hearing loss is prevalent in two-thirds of older adults and reflects progressive impairments in cochlear function leading to impoverished peripheral neural encoding of sound. Research has demonstrated the broader implications of hearing loss for the health and functioning of older adults, particularly with respect to brain aging and dementia. This presentation will summarize current epidemiological and neuroimaging evidence for how hearing loss in older adults affects cognitive load and brain structure/function and relate this contemporary research with previous psychological studies proposing 'information degradation' and 'sensory deprivation' hypotheses of how hearing may affect cognitive function. Finally, the design of an ongoing NIA-funded randomized controlled trial (ACHIEVE- Aging and Cognitive Health Evaluation in Elders) that will determine if hearing treatment reduces the risk of cognitive decline, dementia, and brain aging in adults will be discussed. Part of a symposium sponsored by Brain Interest Group.

## SESSION 7215 (SYMPOSIUM)

### SCALING GERIATRIC AND TELEMEDICINE CARE FOR OLDER ADULTS IN RURAL AREAS THROUGH CLINICAL STRATEGIES AND TRAINING

Chair: William Hung
Co-Chair: Becky Powers
Discussant: Stuti Dang

Telemedicine, the use of electronic information and communication technologies to deliver care, has grown substantially over the past few years, potentially benefiting older adults who have difficulty accessing and traveling to care locations. Given that providers and interprofessional staff with training in geriatric medicine often practice in urban rather than rural areas, older adults' access to quality geriatric care is limited. Prior experiences with telemedicine adoption for geriatric team consultation, though limited in scope, were well accepted by older adults and demonstrated benefits such as identifying and meeting care needs for older adults. Bringing geriatric team care to large regions across the country requires further consideration of population needs, local contexts and training and enhancement of an interprofessional workforce to deliver geriatric care through telemedicine. The Veteran healthcare system has been a pioneer in telemedicine care and considers the use of telemedicine necessary for all providers in its system. This symposium aims to discuss approaches to identify and target older adults who may benefit from geriatric consultation, how care delivery is scaled through identifying common approaches and local adaptations, what the important elements are for providers and teams to deliver care effectively for the older adult population, especially those with multiple complex chronic conditions and functional limitations, and considerations for training the next generation of providers to provide care for older adults with complex conditions, particularly in rural areas with limited access.

### GRECC CONNECT INCREASES ACCESS TO GERIATRIC SPECIALTY CARE FOR RURAL, OLDER VETERANS WITH COMPLEX CARE NEEDS

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