40%) and were younger than their non-LGB counterparts. These findings highlight dementia risk and related problems among LGBTQ older adults. Future studies are needed to better understand dementia risk and recruiting, screening and improving dementia-related outcomes in LGBTQ older adults.

GENDER DIFFERENCES IN HOW THE AMERICAN PUBLIC REACTS TO A PERSON WITH MILD-STAGE DEMENTIA
Shana Stites, Emily Largent, Jeanine Gill, Rebecca Johnson, Kristin Harkins, and Jason Karlawish.
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Many studies show that caregivers for those with Alzheimer’s Disease (AD) are disproportionately female, but few studies have investigated how public attitudes influence this gender disparity. We analyzed secondary data from an experimental study of public reactions to AD dementia. Analysis included 944 respondents who read a vignette about a man with mild stage dementia and completed a modified Family Stigma in Alzheimer’s Disease Scale (FS-ADS), which assesses 7 domains of stigma. Multivariable ordered logistic regression compared men and women on FS-ADS ratings. Women were less likely than men to endorse stronger negative aesthetic attributions (OR=0.75) and negative feelings (OR=0.76) and more likely to endorse stronger feelings of pity (OR=1.33; all p<0.05). No other differences were observed in FS-ADS domains (all p>0.05). The findings offer insights into relationships between gender and AD stigma, which may influence who is willing to become a caregiver for persons with AD and related dementias.

SESSION 7020 (SYMPOSIUM)

BREATHING WELL ACROSS THE LIFESPAN: PULMONARY AGING AND GEROSCIENCE-TARGETED THERAPIES
Chair: Jason Sanders

Excellent pulmonary function is one of the strongest predictors of longevity across animal models and human populations. Unfortunately, none of the major age-associated pulmonary diseases – obstructive lung disease, pulmonary fibrosis, and increased susceptibility to pneumonia – have strongly effective disease modifying therapies. There is growing evidence that normal age-associated decline in pulmonary function and major age-associated pulmonary diseases are linked to the hallmarks of aging including senescence, nutrient signaling dysregulation, mitochondrial dysfunction, and telomere disorders. This presents opportunities for collaboration between gerontologists and pulmonologists to unravel age-associated developmental mechanisms and design novel treatments. In this symposium, leaders in pulmonary aging research will present novel data on links between aging and pulmonary health and geroscience-based interventions under study. Dr. Sanders will provide an overview of the scientific and clinical space and present epidemiologic associations between aging biomarkers, early pulmonary fibrosis, and mortality. Dr. Le Saux will discuss senescence and specifically how eicosanoid biology may explain organ-specific patterns of senescence-associated fibrosis. Dr. Thanickal will discuss age-associated perturbations in metabolism and mitochondrial function and targeting these pathways to improve lung function and treat pulmonary diseases. Dr. Newton will discuss mechanisms and clinical applications of telomere biology to pulmonary aging. Symposium attendees will (1) be poised to generate collaborations between gerontologists and pulmonologists to address existing knowledge gaps in mechanisms of pulmonary aging, and (2) develop a better understanding of translational opportunities to design geroscience-based diagnostics and therapeutics to improve pulmonary health with aging.

ASSOCIATIONS BETWEEN AGING-RELATED BIOMARKERS, INTERSTITIAL LUNG ABNORMALITIES, AND MORTALITY
Jason Sanders, Brigham And Women’s Hospital, Wellesley, Massachusetts, United States.

Interstitial lung abnormalities (ILA) exist in ~10% of adults >50 and associate with increased morbidity/mortality. Their pathobiology is poorly understood; age is the strongest risk factor. In the Framingham Heart Study, we determined associations between ILA and 10 blood biomarkers previously robustly associated with aging and mortality. Odds of ILA increased directly with ln-transformed GDF15 (OR [95% CI] = 3.20 [1.74-5.91], p=0.0002), TNF-αRII (2.41 [1.34-4.34], p<0.003), IL6 (1.76 [1.39-2.22], p<0.0001), insulin (1.56 [1.11-2.20], p=0.01), and CRP (1.53 [1.27-1.84], p<0.0001). Causal analysis showed GDF15 (p=0.008), TNF-αRII (p=0.004), and IL6 (p<0.0001) mediate the age effect on ILA. In adjusted survival models, only higher ln(GDF15) and ln(TNF-αRII) were associated with mortality (HR [95% CI] = 4.3 [2.3-8.1], p<0.0001 and 2.9 [1.5-5.8], p=0.002). GDF15 results were replicated in the COPDGene Study. These results suggest aging biomarkers may help risk stratify adults with ILA, and unmeasured ILA may confound prior associations between biomarkers and mortality.

SENESCENCE AND ITS ROLE IN FIBROSIS
Claude Le Saux, University of California San Francisco, San Francisco, California, United States.

The presence of senescent cells (epithelial and mesenchymal) in fibrotic organs has been well established. Removal of senescent cells in animal models of fibrosis indicate an overall beneficial effect. The general consensus is that the senescent cells contribute to the fibrotic phenotype by the secretion of factors, mainly cytokines and chemokines. We recently demonstrated that senescent cells can also secrete eicosanoids. These lipids are implicated in the pathogenesis of fibrosis in multiple organs. Prostaglandins, especially PGE2, are generally regarded as anti-fibrotic, whereas leukotrienes are thought to be pro-fibrotic. Recent studies indicate that the senescence-associated secretory profile is a dynamic process and its composition is cell, tissue, and time-dependent. In this session I will discuss how senescent cells from specific origin have the potential to regulate fibro-genesis and its resolution by switching their eicosanoid profile expression over time. These findings have important implications for
emerging senolytic drugs, which have the potential to provide novel therapeutic benefits for the treatment of fibrosis.

ENERGY SENSING PATHWAYS IN AGING AND CHRONIC LUNG DISEASE
Victor Thannickal, University of Alabama, Birmingham, Alabama, United States
The cause-effect relationships between the various “hallmarks of aging” and chronic lung disease are not well understood. We have determined overlapping pathways involving deregulated nutrient sensing, mitochondrial dysfunction, and cellular senescence that may contribute to the evolution of chronic lung disease. In particular, I will discuss alterations in energy/metabolic sensing pathways and mitochondrial dysfunction as pathobiological mechanisms that may explain the age-related increased susceptibility to the development and progression of idiopathic pulmonary fibrosis (IPF), a disease of pulmonary aging. I will then broaden the discussion to include the potential role of these biologic alterations in other chronic lung disease which burden older adults.

TELOMERE DYSFUNCTION AND AGING: INSIGHTS FROM PULMONARY FIBROSIS
Chad Newton, University of Texas Southwestern, Dallas, Texas, United States
Telomeres are specialized genomic elements located at the ends of chromosomes that protect protein-encoding DNA from progressive loss during cellular replication. Telomeres shorten with age; therefore, telomere dysfunction is of particular relevance for understanding age-related disease mechanisms. Telomere disorders produce multisystem degenerative organ dysfunction that largely resembles aging phenotypes, including pulmonary fibrosis (PF), emphysema, cirrhosis, bone marrow dysfunction, immunosenescence, and premature hair graying. The degree of telomere shortening influences age of disease onset, involved organs, and disease severity. Notably, the most common manifestation of telomere biology disorders is PF. Subsequently, PF is a model for translating telomere biology into clinical practice. I will discuss the genetics of telomere dysfunction and the clinical manifestations that overlap with age-related phenotypes, focusing on PF. Next, I will discuss how short leukocyte telomere length is an informative prognostic, and potentially theragnostic, biomarker in patients with a range of PF subtypes.

SESSION 7025 (SYMPOSIUM)

CAREGIVING ARRANGEMENTS AND HEALTH OUTCOMES OF CHINESE OLDER ADULTS WITH DISABILITY IN CROSS-NATIONAL SETTINGS
Chair: Jing Wang
Co-Chair: Bei Wu
This symposium focuses on the wellbeing of older adults with disability/cognitive impairment and their family caregivers. More specifically, it aims to understand how family support, community resources utilization, internal migration, and immigrant status impact older adults’ caregiving arrangement, health outcomes and end-of-life preferences and family caregivers’ caregiving burden in China and the U.S. The first study explored how perceived spousal relationships and support impact dyadic experiences of living with cognitive impairment through a person-centered care lens during a three-year period. The second presentation examined the association between adult children’s support and the trajectories of depressive symptom level among Chinese older adults with disabilities. The third investigated how family relationship and immigrant status matter in advanced care planning (ACP) engagement and end-of-life preferences over burial plan among US-born and foreign-born older Chinese Americans living in Honolulu, Hawaii. The fourth study study explored family caregivers’ caregiving burden for community-dwelling patients with dementia and its associated factors. The last study conducted an inventory of longitudinal aging survey datasets to stimulate research on intersection of migration and caregiving arrangement. It paved the way to use existing high-quality datasets to examine the significant impact of massive rural-to-urban migration on caregiving arrangement among Chinese older adults. This symposium presents empirical evidence of the impact of family, migration and culture-related factors on caregiving arrangement and health outcomes of Chinese older adults. The presenters emphasize the importance of providing family-centered care and design culturally sensitive interventions to improve the health outcomes of older adults.

EXISTING DATASETS TO STUDY THE IMPACT OF INTERNAL MIGRATION ON CAREGIVING ARRANGEMENTS
Hanzhang Xu, Yaolin Pei, Matthew Dupre, and Bei Wu, 1. Duke University School of Medicine, Durham, North Carolina, United States, 2. New York University, New York, New York, United States, 3. Duke University, Durham, North Carolina, United States
Massive rural-to-urban migration in China has a significant impact on caregiving arrangements among Chinese older adults. To stimulate research on the intersection of migration and caregiving, we conducted an inventory of longitudinal aging survey datasets that included older adults from mainland China. Large public available datasets that included measures related to migration and caregiving were searched and reviewed for eligibility. Key characteristics of each dataset, including study design, sample size, and measures, were extracted. Seven eligible datasets were identified, and five included national representative samples. Measures for migration varied across datasets. Some datasets included information on the migration history of older adults, whereas others focused on the migration of adult children. Similarly, caregiving was measured using different questions in each dataset. Caregiving activities were assessed with regard to their type, source, and amount. High-quality datasets exist to support research on migration and caregiving arrangements among Chinese older adults.

ADVANCE CARE PLANNING ENGAGEMENT AND END-OF-LIFE PREFERENCE AMONG OLDER CHINESE AMERICANS
Yaolin Pei, Wei Zhang, and Bei Wu, 1. New York University, New York, New York, United States, 2. University of Hawaii at Manoa, Honolulu, Hawaii, United States