often express resistance to disrupting traditional practices with only the well-being of older adults in mind. A full discussion of reasons that Washington University should move purposively toward age inclusivity is important to build consensus and identify opportunities for new practices.

MAKING CAMPUS GREAT AT ANY AGE: ONE UNIVERSITY'S APPROACH TO AFU PRINCIPLES

Cassandra Barragan,[1] Cassandra Barragan,[1] and Andrea Zakrajsek[1], *1. Eastern Michigan University, Ypslianti, Michigan, United States*

This presentation will discuss the focused approach to putting AFU principles into practice that we accomplished with our campus-wide steering committee. We performed surveys for students over the age of 40 to learn the perspectives of older learners and what resources they felt were available on campus. By doing this, we were able to understand more about learners pursuing second careers and through a variety of initiatives at the university level, we have improved visibility of older learners and the richness they bring to our campus. We also collected data from our emeritus faculty and staff to learn how they interact with campus in retirement to understand effective ways to actively engage with them as a retired community. Overall, we have been able to effectively use the AFU Initiative to enhance inclusion and diversity to include older learners on campus and make AFU efforts more visible across campus.

BUILDING RECOGNITION ACROSS CAMPUS AND TOWN FOR USC'S AGE-FRIENDLY UNIVERSITY INITIATIVE

Paul Nash,[1] Paul Nash,[2] and Caroline Cicero[2], *1. University of Southern California, LA, California, United States, 2. University of Southern California, Leonard Davis School of Gerontology, Los Angeles, California, United States*

Details of efforts to highlight existing age-related programming on campus, create a new intergenerational experiential learning program, build a social media presence, and include 'age' in the university's diversity efforts will be discussed. Best practices in community engagement will be emphasized including successes with retired employees, alumni, activities programming, and local age-friendly efforts. Discussion includes the benefits of developing a multidisciplinary working group to ensure the Initiative is a university wide effort and the challenges of working in a large, multi-campus research university located in multilayered bureaucratic local jurisdictions. Future goals and collaboration with AFU Global Network partners and aspirations for addressing societal ageism will be addressed.

SESSION 1425 (PAPER)

BIOBEHAVIORAL HEALTH, HEALTH PROMOTION, AND BIOLOGICAL ASPECTS OF AGING

A NOVEL METABOLITE COMPOSITE SCORE EXPLAINS THE HIGHER MORTALITY ASSOCIATED WITH FRAILTY AMONG OLDER BLACK MEN

Megan M. Marron,[1] Tamara B. Harris,[2] Robert M. Boudreau,[1] Steven C. Moore,[3] Jason L. Sanders,[4] Stacy G. Wendell,[1] Joseph M. Zmuda,7 and Anne B. Newman[1], *1. University of Pittsburgh, Pittsburgh, Pennsylvania, United States, 2. National Institute on Aging, Bethesda, Maryland, United States, 3. National Institutes of Health, Rockville, Maryland, United States, 4. Brigham and Women's Hospital, Boston, Massachusetts, United States, 5. Department of Epidemiology University of Pittsburgh; Pittsburgh, Pennsylvania, United States*

Frailty is more prevalent among black versus white older Americans. We previously sought to better characterize frailty among 287 black men ages 70-81 by identifying 37 plasma metabolites associated with vigor to frailty using the scale of aging vigor in epidemiology (SAVE). Using this information, we developed a metabolite score to determine if it explained the frailty-associated higher mortality. The Human Metabolome Database classified the metabolites as organic acids/derivatives (m=14), lipids/lipid-like molecules (m=12), organoheterocyclic compounds (m=4), benzenoids (m=3), organic nitrogen compounds (m=2), organic oxygen compounds (m=1), and nucleosides/nucleotides/analogues (m=1). Values for each were ranked into tertiles. The metabolite tertile associated with more vigorous SAVE scores was given a score of 0, the metabolite mid-tertile a score of 1, and the metabolite tertile associated with frailer SAVE scores a score of 2. The metabolite composite score was calculated as the sum of the metabolite tertile scores. One standard deviation frailer SAVE was associated with 30% higher mortality (p=0.0002), adjusting for age and study site. The association between frailty and mortality was attenuated by 56% after additionally adjusting for the metabolite score, where organic acids/derivatives and lipids/lipid-like molecules (mostly amino acids, glycerophospholipids, sphingolipids) accounted for most of the attenuation. In this model, one standard deviation higher metabolite score was associated with 46% higher mortality (p<0.0001). The metabolite score also predicted mortality among 48 community-dwelling (96% white) older men (p=0.03). These metabolites provide a deeper characterization of frailty that reproducibly explains a substantial portion of the vulnerability to death in these older men.

GENE-ENVIRONMENT INTERPLAY BETWEEN SMOKING BEHAVIOR AND COGNITION AMONG OLDER ADULTS

Shandell Pahlen,[1] William Kremen,[2] and Chandra A. Reynolds[1], *1. University of California, Riverside, Riverside, California, United States, 2. University of California, San Diego, San Diego, California, United States*

Associations between smoking behavior and lower cognitive functioning have been observed but there is a paucity of evidence examining the etiological impact of smoking on cognition. The current study explored the moderation of genetic and environmental contributions to cognition across mid and late-adulthood by smoking behaviors in 8 twin studies from the international IGEMS consortium (N=11,764; Mage=63.1 years). Mixed effects regression models between smoking behavior and cognition found the strongest negative effects for smoking on Symbol Digit (Bpackyears=-1.42, p<.0001) and Block Design (Bpackyears=-1.79, p=.0008), while controlling for dependency between twin siblings, age, sex, and country. Although the negative effects tended to be

more pronounced for males, we did not find significant sex moderation. Univariate biometric models considered smoking behavior (status and pack years) and age as moderators of genetic and environmental components contributing to cognitive performance. Results for both Symbol Digit and Block Design suggest that smoking (current and past) is associated with lower genetic, and higher environmental influences on cognition compared to non-smoking. For Block Design, but not for Symbol Digit, pack years moderated shared environmental contributions, with the highest contributions found for current smokers compared to former. Overall, results illustrate an increasing saliency of smoking related environmental influences for processing speed and spatial reasoning tasks. Cognitive tasks with speed components may be sensitive to age-related declines, and speed may also represent a factor vulnerable to smoking exposure, potentially implicating important health and neurobiological pathways. Supported by NIH Grant Nos. R56 AG037985, R01 AG060470.

LINKAGES BETWEEN INDIGENOUS CULTURAL GENERATIVITY AND SOBRIETY TO PROMOTE ALASKA NATIVE SUCCESSFUL AGING

Jordan P. Lewis[1], *1. University of Alaska Anchorage, Anchorage, Alaska, United States*

The aim of this study was to explore motivating and maintenance factors for sobriety among older AN adult participants (age 50+) from across Alaska. Ten life history narratives of Alaska Native older adults, representing Alutiiq, Athabascan, Tlingit, Yup'ik/Cup'ik Eskimos, from the PA sample were explored using thematic analysis. AN older adults are motivated to abstain from, or to quit drinking alcohol through spirituality, family influence, role socialization and others' role modeling, and a desire to engage in indigenous cultural generative activities with their family and community. A desire to pass on their accumulated wisdom to a younger generation through engagement and sharing of culturally grounded activities and values, or indigenous cultural generativity, is a central unifying motivational and maintenance factor for sobriety. The implications of this research indicate that family, role expectations and socialization, desire for community and culture engagement, and spirituality are central features to both AN Elders' understanding of sobriety and more broadly, to their successful aging. Future research is needed to test these findings in population-based studies and to explore incorpo- ration of these findings into alcohol treatment programs to support older AN adults' desire to quit drinking and attain long-term sobriety. Sobriety can put older AN adults on a pathway to successful aging, in positions to serve as role models for their family and community, where they are provided opportunities to engage in meaningful indigenous cultural generative acts.

NUTRITIONAL RISK PREDICTS HEALTH SERVICES UTILIZATION AND DEATH OVER 1 YEAR: RESULTS FROM THE UAB STUDY OF AGING II

David R. Buys,[1] Richard E. Kennedy,[2] Yue Zhang,[2] Julie Locher,[2] and Cynthia J. Brown[2], *1. Mississippi State University, Starkville, Mississippi, United States, 2. University of Alabama at Birmingham, Birmingham, Alabama, United States*

Nutritional risk has been demonstrated to be associated with poor health outcomes, increased risk of health services utilization (HSU), and mortality among older adults. The aim of this study was to assess the prospective relationship between nutritional risk; HSU focusing separately on emergency department visits, hospitalization, and nursing home admission; and mortality. Using the University of Alabama-Birmingham Study of Aging II, we examined this relationship among 419 community-dwelling older Alabamians (75+years). We used the Mini-Nutrition Assessment (MNA), a well-validated nutritional risk assessment, which classifies individuals as either well-nourished, at-risk or malnourished, collected at baseline. We assessed HSU by asking about healthcare encounters since the last monthly follow-up call for 12 months and verified death with family reports and official documents. We completed univariate, bivariate, and Cox proportional hazards regression analyses with one-year of follow-up data, adjusting for social support, social isolation, comorbidities, and demographic variables. Accounting for covariates, being either at-risk or malnourished, relative to well-nourished, was associated with emergency department visits (HR: 1.30, 95% CI:1.14,1.48), hospitalization (HR: 1.58, 95% CI:1.37,1.82), nursing home admission (HR: 8.94, 95% CI:3.99,20.02), and mortality (HR: 1.90, 95% CI:1.25,2.88). These findings underscore the growing awareness that nutritional risk, particularly for older adults, is a significant factor affecting their well-being and particularly their ability to continue living in the community. Nutrition assessment, interventions, and services for community-dwelling older adults may lead to a reduction in health care utilization, particularly nursing home placement, and ultimately to reduced healthcare costs to families and taxpayers.

SENSE OF PURPOSE IN LIFE AND REDUCED LIKELIHOOD OF FUTURE DRUG MISUSE

Eric S. Kim,[1] Carol Ryff,[2] Afton Hassett,[3] Chad Brummett,[3] Charlotte Yeh,[4] and Victor Strecher[3], *1. Harvard T.H. Chan School of Public Health, Boston, United States, 2. University of Wisconsin, Madison, Wisconsin, United States, 3. University of Michigan, Ann Arbor, Michigan, United States, 4. AARP Services, Inc., Washington, District of Columbia, United States*

A stronger sense of purpose in life is hypothesized to reduce the likelihood of drug misuse because it has been linked with several protective factors including: increased ability to handle stress and pain tolerance, decreased impulsivity, and reduced risk of depression and chronic conditions. However, the association between purpose in life and drug misuse has been understudied. We tested whether people with a stronger sense of purpose in life had a decreased likelihood of incident drug misuse 9-10 years later. We also tested whether people with a stronger sense of purpose were less likely to cope with stress by misusing drugs. Participants were drawn from the Midlife in the United States Study (MIDUS; n=3,483) and from a stress coping module of the Health and Retirement Study (HRS; n=498). Among MIDUS respondents not misusing drugs at baseline, people in the highest quartile of purpose (compared to people in the lowest quartile) had 42% reduced odds (95% CI: 0.37-0.92) of incident drug misuse 9-10 years later in the fully-adjusted model (e.g.,