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,<sup>1</sup> Cassandra Barragan,<sup>1</sup> and

Andrea Zakrajsek<sup>1</sup>, 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,<sup>1</sup> Paul Nash,<sup>2</sup> and Caroline Cicero<sup>2</sup>, 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,<sup>1</sup> Tamara B. Harris,<sup>2</sup> Robert M. Boudreau,<sup>1</sup> Steven C. Moore,<sup>3</sup> Jason L. Sanders,<sup>4</sup> Stacy G. Wendell,<sup>1</sup> Joseph M. Zmuda,7 and Anne B. Newman<sup>1</sup>, 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,<sup>1</sup> William Kremen,<sup>2</sup> and Chandra A. Reynolds<sup>1</sup>, 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