MIAMIBEACH, FLORIDA, USA, February 20 2019. Responding to dramatic increases in the world’s aging population, the U.S. Department of Health and Human Services (HHS) holds programs across the spectrum from basic science to community implementation aimed at improving function and promoting healthy aging and independent living among older adults according to Rosaly Correa-de-Araujo, senior scientific adviser at the National Institute on Aging (NIA). Many of these programs were featured at a symposium organized by Dr. Correa-de-Araujo today at the International Conference on Frailty and Sarcopenia Research (ICFSR) in Miami Beach, Florida.

Dr. Marie Bernard, deputy director of the NIA, for example, described two recent NIA-funded observational studies showing that a healthy lifestyle compromises the disabled period in older adults. One of these studies, which used data from a representative sample of adults aged 65 and older participating in the Health and Retirement Study, showed that while people are living longer, there appears to be no increase in the period of time lived with cognitive impairments, according to Dr. Bernard.

Dr. Bernard also described programs in the emerging multidisciplinary field of geroscience, which hypothesizes that by intervening in the process of aging, it may be possible to forestall the development of chronic illnesses. For example, she cited a recent study showing that feeding mice a cocktail of senolytics—a new class of drugs that eliminate senescent cells associated with aging-related tissue damage—prevented cell damage, delayed physical problems, and extended healthy lifespan. The NIA also supports clinical studies exploring interventions aimed at promoting healthy aging, for example, by targeting cardiovascular risk factors, said Dr. Bernard.

Beyond funding longitudinal, clinical, and basic research studies on aging, the NIA has also established infrastructure to ensure that data and knowledge from those studies are shared with the broader scientific community to accelerate science that will help extend the healthy active years of life for older adults, said Dr. Correa-de-Araujo. Since these studies generate a vast collection of biospecimens and related phenotypic and clinical data, the NIA recently established the AgingResearch Biobank (https://agingresearchbiobank.nia.nih.gov), a state-of-the-art central repository for biospecimens and related data from extramural research activities.

More than 1.8 million samples—DNA, plasma, serum, urine, and immortalized cells—are already available in the biobank from two large studies: the Lifestyle Interventions and Independence for Elders (LIFE) study and the Study of Women’s Health Across the Nation (SWAN), said Dr. Correa-de-Araujo. LIFE is the largest and longest randomized trial of physical activity in older persons, which demonstrated that a long-term structured physical activity program reduced incidence of major mobility disability in older people at risk for disability. SWAN is a multi-site longitudinal epidemiological study designed to examine the health of women during mid-life through the collection of rich data at annual visits over a 25-year period. Started in 1994, the study has produced many interesting findings about health and aging in women from diverse communities, ethnicities, and backgrounds, said Dr. Correa-de-Araujo. Indeed, the SWAN website lists over 450 publications based on research from the study.

“This very rich collection of data has begun to describe the timing of and the normal variation in the biologic and psychological characteristics of the midlife transition as well as in normal aging,” said Dr. Correa-de-Araujo. Moreover, she said, “pairing these one of a kind resources with the possibility of pooling data significantly increases the value and power of future research,” adding that new collections will be added to the biobank in the incoming months.

Through the Administration for Community Living (ACL), HHS also supports evidence-based chronic disease self-management education (CDSME) programs as well as community-based programs focused on falls prevention, nutrition, behavioral health, and oral health, said Carol Nohelia Montoya, network director at Florida Health Networks. An analysis of these programs between 2009 and 2016 found that CDSME workshops were delivered in 56.4% U.S. counties, and that more than half of these were in non-metropolitan areas, said Dr. Montoya. Another study estimated that if community based chronic disease self-management programs reached 5% of adults with chronic conditions, potential costs savings could exceed $3 billion, she said.