We all aspire to be healthy as we age, but what does that mean, and what can we do to continue our good health as we grow older? At the Center for Healthy Aging Research (CHAR), we make answering these tough questions our life’s work.

Because the science of aging is complex, we take a multidisciplinary approach to address aging processes at all levels — from cellular and biological aspects to social and environmental factors that impact how we age.

We not only consider the genes we inherit, the food we eat and our level of physical activity, but also the quality of our relationships and the environments in which we live.

We conduct interdisciplinary studies that capture the various factors that affect aging, which will lead us to the discovery of new methods for preventing disease and ensuring healthy aging.

Because our aging population — those 65 and older — is expected to more than double by 2030, we are faced with both challenges and opportunities to discover the keys to optimal aging through our research and to ensure that aging adults live healthier longer.
Our faculty is working to develop, refine and evaluate a web-based tool that captures people’s health motivations, preferences and personal characteristics. The information captured from this interactive technology is then provided to them in order to facilitate engagement in management or prevention of chronic disease.

In our biomechanics and bone laboratories, we conduct research on osteoporosis and how and why adults fall, as well as exercise programs to promote health and prevent falls and fractures.

Our social scientists and epidemiologists study aging individuals, their families and older populations to better understand the mental and physical reactions to stress, coping and caregiving. We explore why many people experience surprising resilience as they face the challenges of aging.

By studying the biology of aging and the impact of oxidative stress and inflammation on cardiovascular and neurological diseases, we discover how dietary micronutrients can decrease and sometimes prevent stress responses.

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Experts collaborate across disciplines
More than 45 faculty members are actively engaged in four core areas of research led by preeminent experts in their fields.

**Diet and Genetics**
- Biological mechanisms in aging
- Molecular analysis of age-related stress responses
- Nutritional strategies for increasing healthspan

**Population, Social and Individual Health**
- Social, psychological and biological determinants of health and disease in later life
- Health and well-being in individual, relational and family contexts
- Intervention and prevention to support and promote healthy aging

**Musculoskeletal**
- Lifespan promotion of bone health
- Exercise interventions to enhance mobility and physical function
- Fall prevention strategies

**Gerontotechnology**
- Innovations in supportive technologies for independent living
- Research and development of technology in support of aging related research
- Wearable sensors for monitoring activities unobtrusively

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**CHAR’s vision is to be an internationally known center for innovative research, education and outreach that enhances the quality of life for older adults, their families and communities.**