Faculty from numerous colleges, schools, departments, centers and institutes at Oregon State are exploring the physical, emotional, social and environmental aspects of aging.

College of Public Health and Human Sciences

College of Engineering

College of Liberal Arts

College of Pharmacy

College of Science

College of Veterinary Medicine

Environmental Health Sciences Center

Linus Pauling Institute









For more information:

Center for Healthy Aging Research College of Public Health and Human Sciences

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College of Public Health and Human Sciences

Center for Healthy Aging Research



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.



Oregon State's | commitment to healthy aging

As Oregon's Land Grant university, we are committed to working with communities across the state and nation in discovering and implementing practical interventions that will promote health and well-being across the lifespan and to manage diseases and conditions associated with aging.

For more than four decades, Oregon State has prepared graduate and undergraduate students for gerontology professions, educating future leaders who will design responsive healthcare, housing and social options for our nation's aging population.

The university's nationally recognized Program on Gerontology was established in 1972 and annually hosts the largest gerontology conference in the Pacific Northwest.

CHAR itself originally was funded as one of Oregon State's six strategic initiatives and has leveraged millions of dollars for aging research since its inception in 2005. Funding agencies include the National Institutes of Health, the U.S. departments of Defense and Agriculture, the National Science Foundation, and private foundations and industry.



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.



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.



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.

Diet and Genetics

- Biological mechanisms in aging
- Molecular analysis of agerelated stress responses
- Nutritional strategies for increasing healthspan

Lifespan promotion of bone

Exercise interventions

physical function

to enhance mobility and

Fall prevention strategies

Musculoskeletal

health

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

Gerontechnology

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



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.



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.

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.