Director’s welcome

Florida has the largest proportion (18.1 percent) of persons age 60 years or older in the nation and this age group also represents the fastest growing segment of the population. Therefore it is critical that we as the Institute on Aging address the health concerns of this portion of our population. In this spirit, we are proud to announce that we have received funding from the National Institute on Aging to establish the Claude D. Pepper Older American’s Independence Center (OAIC). The mission of the UF OAIC is (1) to assess the risk factors and better understand the biological reasons for physical disability in older adults, (2) to develop and test effective prevention and rehabilitation therapies, and (3) to educate and train new investigators in research on aging and disability, while developing their leadership qualities and roles.

Our center’s research theme is “sarcopenia, prevention and rehabilitation of disability.” This issue of Changing Seasons will explain what sarcopenia is and how combating this health issue will lead to greater independence in older Americans.

At our center, we have assembled an outstanding and diverse team of investigators to accomplish this goal and we will highlight some of them and their research programs in this issue.

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Claude Pepper, living a legacy

The National Institutes of Health has awarded the University of Florida’s Institute on Aging a Claude D. Pepper Older American’s Independence Center. With the grant, named in honor of the former senator, UF’s IOA has joined the ranks of the most prestigious centers of aging research and education in the nation.

U.S. Senator Claude Denson Pepper was known in his lifetime as a spokesperson for older citizens. Not only was he a recognized advocate of the elderly, Pepper embodied vital, successful aging. In the Pepper Older American’s Independence Centers, his legacy lives on.

Pepper, politician, philanthropist and champion of the elderly, was born in rural Alabama in 1900. He lived an active life. After attending public schools and working in a steel mill, Claude D. Pepper graduated from the University of Alabama and Harvard Law School, then taught law at the University of Arkansas before he moved to Perry, Florida, in 1925 to set up practice. In 1929 he served two years in the Florida State House of Representatives, was elected to the U.S. Senate until 1951, and served in the U.S. House of Representatives from 1962 until his death in 1989.

Claude Denton Pepper’s legacy, however, was forever established when he became chair of the new House Select Committee on Aging in 1977, and emerged as the nation’s foremost advocate for the elderly.

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A major goal of the Institute on Aging and the Older American’s Independence Center is to help develop treatments in the elderly population for combating sarcopenia. Sarcopenia, from the Greek meaning “poverty of flesh,” is the loss of skeletal muscle mass and strength during the aging process.

Muscle weakening is linked to poor balance, walking speed, falls and fractures. Therefore, it is of great importance that people 55 and over maintain muscle mass and strength in order to function and live independently. Scientists at the UF Institute on Aging’s Pepper Center are taking many different approaches to tackling the issue. Two are highlighted here.

Weight loss and muscle strength

Elderly people who experience a combination of weight gain and muscle loss are often stuck in a vicious cycle that can lead to inactivity, increasing immobility disease and early death.

Michael Perri, Ph.D., associate director of the UF Institute on Aging and a professor in the College of Public Health and Health Professions, has been awarded an opportunity grant by the University of Florida to study the interaction of behavior and body chemistry that leads to weight gain, muscle loss and obesity-related diseases, and to develop a lifestyle intervention to help people stay active and healthy longer. The six-month study will lay the groundwork for a future randomized clinical trial.

In the United States, the occurrence of obesity varies by age, race, and sex; the highest prevalence is observed in older, black women. For that reason, Perri is testing a weight loss and exercise lifestyle intervention, which includes eating 500 to 1000 fewer calories a day in combination with moderate exercise, in a population of 20 obese, sedentary African-American women who have difficulty getting around and completing everyday activities.

“The study is assessing if changes occur in body composition and how strong an impact that has on physical function and performance,” Perri said. “We would like to see if weight loss can decrease inflammation and slow down the cell death that weakens muscles.”

Low-impact exercise and maintaining muscle strength

Beverly Roberts, Ph.D., a professor and researcher with the Institute on Aging and the UF College of Nursing, became interested in the effects of tai chi on elders’ balance and strength. Through the support of the Pepper Center and a University of Florida opportunity grant, Roberts is testing tai chi as a possible exercise intervention for inactive elderly people.

As she researched exercise interventions for people weakened with sarcopenia, Roberts found that even walking was too difficult for some inactive elderly. She developed a test that assesses muscle strength, balance and disability mobility using a low-impact form of tai chi.

Her 45 study participants take slow steps, make slow movements and keep both feet on the ground as they perform tai chi. Over the course of the study Roberts will assess participants’ ability to perform daily activities and their physical and psychological health. A second group which acts as a control, maintain their normal activity during this period.

“Participants in the tested group have commented that they are more relaxed and less stiff since beginning the sessions,” Roberts said. “Some people have said they are able to do more. All seem to like it and have seemed to be getting some benefit. These are people who, for the most part, have trouble walking. That they start thinking that this is something they feel they can do is an amazing change.”
Claude Pepper continued from page 1

In 1986 he established The Claude Pepper Foundation to preserve and make available his vast collection of papers, images, recordings, and memorabilia. As a key participant in shaping extensive, momentous public policy, Senator Pepper understood his collection’s educational potential and historical significance.

The goals of the foundation are based upon the principles by which Claude and his wife, Mildred, lived. Over the years, the foundation has developed extensive programs to further the causes he championed throughout his political career, including those dedicated to meeting the needs and maximizing the potential of all people, especially the elderly.

In Claude Pepper’s eulogy on the House Floor, Florida Congressman Bill Young said, “Claude was the friend of millions of Americans, most of whom never met him in person. They were his friends because they believed in him and recognized that he was fighting to make their way of life a little bit better.”

Now through their work in geriatrics patient care, research and education, scientists at UF’s Institute of Aging work to carry on Claude D. Pepper’s legacy of helping people live stronger longer.

With exercise, elders can improve weakened physical abilities

With a prescription of regular structured exercise, sedentary elderly are able to safely improve their physical function and may reduce the likelihood they will experience difficulty walking a quarter mile, according to findings from a multicenter pilot study led by the University of Florida Institute on Aging.

UF researchers announced the results of their Lifestyle Interventions and Independence For Elders pilot, or LIFE, at the Gerontological Society of America’s annual meeting in Dallas. The research was also published in the November issue of the Journal of Gerontology.

The findings confirm the feasibility of a full-scale clinical trial using physical activity in older people, said Marco Pahor, director of the UF Institute on Aging and the study’s principal investigator.

“This pilot demonstrates that the physical activity was extremely safe for the study participants — elderly people at a high risk of becoming disabled,” Pahor said.

The LIFE study was conducted at four centers — the Cooper Institute, Stanford University, the University of Pittsburgh and Wake Forest University — and was funded by the National Institute on Aging. The coordinating center was based at UF and the data management center was based at Wake Forest University.

The pilot study was the first to gather evidence that physical activity can improve the score on a standardized test of lower extremity physical mobility called the Short Physical Performance Battery, or SPPB, the researchers said.

“We have shown a 29 percent reduction of incapacity to walk. That is highly promising for the success of the full-scale study,” Pahor said.

Legacy of giving

With the new Pepper Center awarded by the National Institute on Aging, the University of Florida becomes a nationally recognized leader in research, education and patient care, particularly relating to increasing the likelihood for independence in daily living for us as we grow older.

The IOA needs partners who are committed to joining the effort to ensure that good health and independence are more likely to happen for us all as we age. Your support of aging research and education at UF will educate future health-care providers in how to care for older persons, support our world-class faculty in cutting-edge research, and create a legacy for UF to remain a leader in providing a healthier tomorrow for us all.

Please contact Troy Munn, director of development, at (352) 265-7227 or tmunn@aging.ufl.edu, if you would like more information about how you can help. You can also give online at www.aging.ufl.edu.
Q: What exactly is “independent living” and how do I achieve it?

A: We Americans, especially Baby Boomers, are an independent lot! We want to be in charge of our lives. This desire for independence not only stays with us, but it frequently grows stronger as we age.

Independence means two things: maintaining function (doing things for ourselves) and making our own decisions (autonomy).

Maintaining physical function requires activity. A program of exercise or physical activity, such as walking, gardening, dancing, etc., is crucial. There are even programs for persons with arthritis or other medical problems.

Autonomy requires an active mind. Remain socially active with relatives, friends and social groups. Take up a challenging new mental activity, such as learning how to use a computer. Don’t allow yourself to become blue or depressed — socializing and physical activity can help you feel better; but if sadness becomes severe, tell your doctor — depression is eminently treatable.

Avoiding injury is crucial in maintaining independence. Decreasing muscle strength increases the likelihood of falls, the main cause of injury. The most destructive injury is a hip fracture, which can lead to dependency and institutionalization. Look around. Make sure your home is safe. Is there sufficient lighting? Are extension cords out of the way? Is furniture or throw rugs located in pathways?

Support, including emotional support and help with chores, is an integral part of independence. An active social life will help assure emotional support. When necessary, get help from relatives and friends in doing chores, hire others to mow the lawn, and use agencies to assure one’s independence. Contrary to belief, calling on others in appropriate circumstances is an important aspect of maintaining independence.

So, keep physically and mentally active, make your surroundings safe, keep socially active and call on the help of others to maintain your independence.