

Touro OT Professor AND Former Dancer Partner ON Fall Prevention Class For Elderly



Ms. Celeste Carlucci leads class in strengthening exercises

With the baby boomer generation nearing senior citizenship, falls among the elderly are quickly becoming a mounting public health crisis in the U.S. Falls are the leading cause of injury deaths among people over 65, accounting for approximately 13,000 deaths and 1.8 million emergency room visits a year. An older adult falls every 18 seconds and an elderly person dies of complications caused by a fall every 35 minutes.

Touro College Occupational Therapy Assistant Professor Julie Kardachi and her longtime friend, former professional dancer Celeste Carlucci, are doing their part to address the problem with a fall prevention class for the elderly that com-

bins Ms. Carlucci's expertise in strengthening and balancing exercises for dancers and Ms. Kardachi's expertise in adult rehabilitation, health and wellness education, and gerontology.

The class, which has been featured on ABC's "Good Morning America," WNBC and WCBS-TV news in New York, and Martha Stewart Living Radio, has drawn praise from Sen. Barbara Mikulski (D-Md.), who said during her interview with GMA that she wishes there would be a class like it "in every state, in every city and community throughout America."

Sen. Mikulski led a six-year struggle to pass the first fall prevention legislation, the Safety of Seniors Act, which was signed into law by former President Bush in April 2008 and provides a framework to reduce

and prevent elder falls through public education campaigns, demonstration projects, research, and studying the effects of falls on health care costs. Fall-related injuries for seniors cost over \$19 billion annually and if the current rate of falls among the elderly is not reduced, fall-related treatment costs will reach \$43.8 billion annually by 2020, according to estimates by the Centers for Disease Control and Prevention. The senator was also instrumental in getting the Senate to pass a resolution designating Sept. 22, 2008 as "National Fall Prevention Awareness Day."

Ms. Kardachi and Ms. Carlucci teach beginner and intermediate levels of their class called "Fall Stop...Move Strong" four times a year at the Jewish Community Center on the Upper West Side of Man-

hattan. They also teach the beginner's-level class at the Mt. Sinai Martha Stewart Center for Living and the Lower East Side Educational Alliance. In addition, they have released a DVD that features four 12-minute exercise programs taken from the class that seniors can utilize to help them prevent falls, along with a booklet of tips and strategies to reduce falls. The DVD can be purchased through their website, www.fallstop.net.

Elderly adults, many of whom are taking the class due to suffering injuries from past falls, say it builds both their strength and confidence. "I had very little confidence in my balance before and now I'm able to do more," says 90-year-old Ron Gilbert, a retired TV and radio producer. "I'm not concerned about trying new things on my own like going up and down stairs, getting on a bus or taking a taxi and before I was."

Evelyn Aquaro, a 91-year-old retired

get over my fears and to be more confident, grounded and rooted on my feet, as well as more secure when I take a step. I love this class. It's a transformative class if you stick with the program. It really helps you correct the misalignments in your body that creep in as you get older."

The idea to start the class arose five years ago when Ms. Carlucci was teaching a class in movement and exercise for seniors and Ms. Kardachi was teaching physical rehabilitation and gerontology at the BS/MS occupational therapy program at Touro.

"I was teaching older people and I wanted to get them the educational component that Julie comes with," says Ms. Carlucci, who received her dance training at the Alvin Ailey American Dance Center school and performed modern dance and jazz theater nationally and internationally with top choreographers including Bob Fosse. Adds Ms. Kardachi, "There's a



Ms. Kardachi teaches students how to get up after a fall

elementary school teacher who has suffered two bad falls and had hip replacement surgery five years ago, says she loves the class and tells everyone about it. "I can hear their voices telling me to keep my shoulders back and walk with my heels first. It's helped give me a positive attitude about walking without falling."

And Cynthia, a 70-year-old retired New York City public school teacher who declined to give her last name, says the class has improved her strength, balance and walking ability and has helped her overcome her fears of falling again. She smashed her left wrist and needed surgery following a bad fall in 2005. "After that I became fearful of falling, fearful of being out in the street. This class is helping me

bunch of research about falls, what causes them and effective ways to prevent them so we put our heads together to create a program that took advantage of Celeste's background as a dancer and my background as an occupational therapist to put these two pieces together."

With her dance background, Ms. Carlucci not only teaches class members the joy of movement, how to reclaim their bodies and how to bolster confidence in their physical abilities; she incorporates the research about the most effective types of exercises to prevent falls into her exercise program. Seniors use hand weights and do lunging, balancing and strengthening exercises focused mostly on the thighs, hips, legs and trunk.

"It's a training program," says Ms. Carlucci. "It's kind of like teaching a dancer how to dance. You have to really teach them the mechanisms for standing on their feet. There's something about this demographic. They want it so badly. They respond and they really need it." She says the dance element in the classes is what really differentiates it from other exercise classes. "I really put a lot of emphasis on people feeling joy in moving. It's so much more about feeling your body and being joyful than about doing 10 reps."

For her part, Ms. Kardachi, who was previously supervisor of inpatient rehabilitation at NYU Hospital for Joint Diseases and still works there as an OT one day a week, educates class members about changes in their bodies that put them at risk for falling as they get older and the things they can do to compensate for some of those changes to prevent falling. She teaches students how to safely perform activities such as carrying their groceries, getting on and off a bus, in and out of a taxi, up and down stairs, and down and up off the floor correctly to avoid falls. And she teaches them how to get up properly with the aid of a passerby if they do fall. Class members also have a safe place to talk about their fear of falling so they don't feel so alone.

Both Ms. Carlucci and Ms. Kardachi also work on posture with their classes. "People in the class have been told by their doctors that they've grown two inches or that their bone density has increased," Ms. Kardachi says. The research indicates that people who continue to exercise for six months have a much better reduction in their risk of falling, which is why, according to Ms. Kardachi, many students want to continue taking the classes and why she and Ms. Carlucci give the students a home exercise program as well.

Celeste Carlucci and Julie Kardachi have been friends since Ms. Kardachi came to New York from Australia 21 years ago and they met while waitressing together at a restaurant in Tribeca. Fortunately for the elderly, their career paths crossed later in life, enabling them to improve the lives of seniors by helping them avoid debilitating and potentially deadly falls. ■

For more information on the "Fall Stop...Move Strong program, visit www.fallstop.net or email info@fallstop.net