

# Shall we dance?

## Doing the tango improves the aging brain

The sultry moves of Argentine tango dancing can help the aging brain. McGill researchers have discovered that the fancy footwork required to perform the tango bolsters brainpower and improves balance.

With Canada's growing aging population, this news is music to health professionals' ears. About one-third of the elderly population in Canada experiences a fall each year and 40 percent of hospital admissions of this age group are due to fall-related injuries. Statistics show that 71 percent of seniors over the age of 65 live alone, and many spend more than seven hours a day without any social contact. This isolation, coupled with the normal aging process, can lead to cognitive decline.

This is where tango steps in. "Our findings suggest that tango may be better than walking for improving the execution of complex tasks and the ability to move within a restricted area without losing one's footing," says McGill University School of Physical and Occupational Therapy professor Patricia McKinley. For the study, funded by the Drummond Foundation, researchers recruited 30 seniors from Cummings Jewish Senior centre, aged 62 to 90. All were healthy individuals who had experienced a fall within the last year and had developed a fear of falling. Half the group was assigned to take tango lessons and the other half to a walking group. Each group met for two hours twice a week for ten weeks at the Constance Lethbridge Rehabilitation Centre. The tango group showed more improvement in balance, posture and motor coordination, as well as cognitive gains, than the walking group. They also performed significantly better than the walking group at performing a complex cognitive task while walking, standing on one foot, or turning in confined spaces.

Memory testing, however, was inconclusive, perhaps because the sample size was not large enough, says McKinley.

"Tango dancing is an ideal leisure activity for this population," says McKinley. "It satisfies three basic requirements for exercise adherence: it's fun, it's a group activity, and it has a tangible goal that can be perceived not only by the dancer, but by his or her family and friends."

### **About McGill University**

McGill University is Canada's leading research-intensive university and has earned an international reputation for scholarly achievement and scientific discovery. Founded in 1821, McGill has 21 faculties and professional schools, which offer more than 300 programs from the undergraduate to the doctoral level. McGill attracts renowned professors and researchers from around the world and top students from more than 150 countries, creating one of the most dynamic and diverse education environments in North America. There are approximately 23,000 undergraduate students and 7,000 graduate students. It is one of two Canadian members of the American Association of Universities. McGill's two campuses are located in Montreal, Canada.

*Media wishing to interview Dr. Patricia McKinley and/or seniors who participated in the study, please contact Cynthia Lee at 514-398-6754 or [by email](#).*