## LIFE AFTER STROKE



On a sunny day six years ago, Marco Chorbajian was enjoying a cup of coffee at home with his wife when he suddenly felt tired, so he opted to take a nap.

An hour later, he awoke and picked up a Sudoku puzzle, and was alarmed to discover he couldn't hold a pen in his hand. Worried, his wife decided to take him to the hospital and by the time they got there, Marco could no longer walk.

Marco, then 69, had suffered a stroke that left him unable to move or speak. He remained in the hospital for three months.

"It was very frightening," Marco recalls. "All I wanted to do was die."

A visit from his young grandson transformed Marco's mental outlook and inspired him to fight for recovery. He checked himself out of the hospital and started private physiotherapy. He began to swim daily, and after 18 months of walking in the pool he shifted his rehabilitation to land, working his way up to walking 5,000 steps a day all over the city.

An avid tennis player, Marco was devastated when the nurses told him he would never play again. He decided to prove them wrong. He took his tennis racket to bed with him at night, even though he couldn't grip it. Now, six years later, Marco is playing tennis twice a week. And he has completed the Vancouver Sun Run several times.

Today, more Canadians are surviving strokes due to advances in awareness and medical services. Stroke recovery is a journey that can continue for years or a lifetime. Research funded by the Heart and Stroke Foundation has made great strides to improve and advance stroke recovery. Marco is living proof.

"Working with researchers like Dr. Janice Eng saved my life," says Marco.

In fact, their work continues to find new, innovative best practices for faster and more effective recovery from stroke.

Today, Marco visits stroke survivors across Metro Vancouver to offer advice, encouragement and support.

"I decided that stroke survival is going to be my life's work," he says. "I want to help any stroke survivor any way I can."



## FASTER RECOVERY FROM STROKE



Dr. Teresa Liu-Ambrose (left) together with Dr. Janice Eng (right)

Can stroke survivors receive a brain boost by participating in simple exercise and recreational programs?

HSF-funded researcher Dr. Janice Eng thinks so, and together with Dr. Teresa Liu-Ambrose, she's collecting the evidence to prove it.

Using a combination of exercise and social enrichment, they're showing how physical movements can benefit both basic brain function and higher level mental skills like decision-making, planning and strategizing.

It's common for stroke survivors to suffer from a loss of cognitive functions like thinking and memory, along with physical damage that can prevent them from being active. This makes it challenging for them to live highquality, independent lives.

Much of the research on stroke recovery focuses on either the physical or the mental rehabilitation, but Dr. Eng and Dr. Liu-Ambrose believe there is an intricate, reciprocal relationship between the two.

In fact, Dr. Eng has been conducting research in this area for 15 years, and explains the drastic changes in best practices for stroke recovery during that time:

"Ten years ago you were not encouraged to be particularly active," she says. "The practice has really changed, and we need to get the message out: it's okay, in fact, better to have a more exercise-intense lifestyle after a stroke. The evidence is showing it can improve not only your physical function and your quality of life, but your mental health, too."

Just imagine the advances in stroke recovery we can continue to make in the next 10 years, with your support.

Dr. Janice Eng, along with Dr. Teresa Liu-Ambrose, is improving mental recovery from stroke with exercise.



ABOUT DR. JANICE ENG BSR (PT/OT) (UBC), MSc (U. Toronto), PhD (U. Waterloo)

Dr. Eng is a Professor at UBC and the GF Strong Rehab Centre. She has a clinical training in physical therapy and occupational therapy. She is a recipient of a Michael Smith Senior Scholar Award and dedicates most of her time to clinical research. She has developed novel exercise interventions and has undertaken randomized controlled trials to demonstrate their effectiveness in improving mobility, fitness, bone health, cognition, upper extremity function and quality of life in people with neurological conditions. Two of her stroke exercise programs, Graded Repetitive Arm Supplementary Program (GRASP) and Fitness and Mobility Exercise Program (FAME), are used in over 500 sites in 20 countries. She has been inducted as a Fellow of the Canadian Academy of Health Sciences and her work has been recognized by a Jonas Salk Award for lifetime contributions to reducing disability.



To learn more or donate, visit: www.heartandstroke.bc.ca.