Forever young

The interdisciplinary field of geroscience may be less than a decade old, but Parminder Raina is already among its leading stars.

The Canada Research Chair in Geroscience and the only geriatric epidemiologist to receive an Ontario Premier’s Research Excellence Award is leading one of the largest and most comprehensive studies ever done on health and aging.

With a national team of more than 160 researchers and collaborators, the Canadian Longitudinal Study on Aging is following 50,000 randomly selected men and women between the ages of 45 and 85 over a 20-year period to learn why some people live longer and others don’t.

Using cognitive and physical tests, interviews and questionnaires, researchers will monitor changes in every aspect of the participants’ lives, from the biological and psychological to the social, lifestyle and economic.

“We want to know how each aspect — alone and in combination — impacts the health and development of disease and disability of people as they age,” says Raina.

It’s a cell to society approach that will yield a rich mine of data for researchers worldwide. “Already, we are seeing that good education, nutrition, physical activity and brain activity are promising indicators for improved cognitive ability in later life.”

Raina was recently tapped to lead McMaster’s new Institute of Geroscience, the first in Canada to bring together interdisciplinary groups of faculty members and postgraduate students to conduct cutting-edge research on aging.

“There is no institution better equipped to do this,” insists Raina. “We have the kind of capacity that doesn’t exist anywhere else in Canada.”

The new Institute will be closely linked with a web site dedicated to making the best available research evidence on healthy aging available to everyone free of charge.

“The timing couldn’t be better,” he notes. “There are more than 5,000 Canadians who are now over 100 years old, and the number of seniors will double in the next two decades. What we learn about how they age, and what causes disease and disability as they grow older, could lead to new interventions and innovative programs that will keep us all living healthier for longer.”