Age-old Mystery

QC Professor Nancy Foldi studies how the elderly brain functions, or doesn’t

By Leslie Jay

If asked to choose between heart and mind, Nancy Foldi (Psychology) would put all her money on the latter—as a research area. “No offense to cardiologists, but the brain is the most amazing organ in the body,” she says. At QC—a center for neuroscience—plenty of colleagues would agree with her.

“The QC-CUNY doctoral subprogram in neuropsychology is exactly the kind of program I was looking for [as a student],” comments Foldi. In effect, she created her own curriculum. She earned bachelor’s and master’s degrees in linguistics before switching to psychology, completing an MA and PhD from Clark University in Massachusetts, and pre- and postdoctoral fellowships in the psychiatry department at Harvard Medical School. When her post-doc ended in 1983, Foldi went to Mount Sinai School of Medicine as the first Director of Neuropsychology in the newly opened Department of Geriatrics and Adult Development. She has specialized in the neurological function of aging for 25 years and taught at QC for nine.

“The brain does not stop developing at age 20 or 21. It continues to develop, and as the brain ages in healthy people, it does things differently. We don’t completely understand why,” says Foldi, who points out that much of the existing neurological data was collected from people with impairments or brain disorders. To address that gap, she is leading a QC study of well elderly, giving simple computerized tasks to 200 men and women, age 18 to 90, some of them recruited from local senior centers.

The daughter of an opera singer who moved his career and family to Switzerland, Foldi speaks French, German, and Swiss-German, but not any Asian languages, unfortunately. “The attention tasks can be used in diverse populations, but many of the other cognitive tests are normed in English,” she observes. “It would help to know some Chinese dialects.”

At Winthrop University Hospital in Mineola, where she is Director of Neuropsychology in the geriatrics division of the department of medicine, she sees elderly people who are less healthy. “In the early stages, patients with Alzheimer’s disease become very easily overwhelmed,” explains Foldi. “Handling activities that they had managed before becomes harder.”

Neuroscientists are debating which deteriorates first: memory, or the attentional mechanism in the brain that helps to select and emphasize what should be remembered. To help resolve this question, another one of Foldi’s studies, based at Winthrop and funded entirely by the Alzheimer’s Association, is investigating how medications used to treat Alzheimer’s affect a person’s ability to concentrate.

An essential part of her research is to involve students. When they work with Foldi, they get the chance to interact with people of all ages; it’s an eye-opener for younger students to meet adults in their 90s. “[I get the biggest kick out of seeing students when they take histories and hear people say, ‘Yes, I was in the siege of Odessa,’ or ‘I worked on the Hubble,’ or ‘I had 14 children,’” she says. “It’s absolutely imperative to train neuropsychologists to work with the elderly, including the well elderly. We’re all going to be older, so we’d better know what we’re doing.”