



Dr. Roberta Bondar has been to space aboard the space shuttle Discovery, but her current mission is Alzheimer's awareness

Dr. Roberta Bondar knows something about new frontiers.

And how far the human race has come in remarkable exploration.

But it's not space which Canada's first woman astronaut believes we are close to making startling advances in.

Instead, it's our knowledge of our most fragile selves.

While a national celebrity for her NASA work, including her heralded 1992 flight aboard the space shuttle Discovery, it's her work as a neurologist that keeps her grounded now.

And there's no mission she's more passionate about, apparently, than exploring the still shadowy world of Alzheimer's disease.

Humans have not ventured past the moon. We most often reach, as a species, only as far as a fast orbit around Earth.

"But compared to the darkness of space...we are much further along in understanding the brain," she told me yesterday during a pause in a day of press interviews in Toronto.

Within a decade, she estimates, man will have much better drug treatments to help postpone the ravages of Alzheimer's – the progressive, degenerative ailment which perhaps like no other disease steals the personalities of those afflicted.

Over the years, Bondar has seen the parents of peers and friends fall victim to the thread-like tangles and plaque blemishes that choke brain cells. But rather than that clinical explanation, she has listened as care-givers have explained their elders simply forget those who are most precious in their lives. Children who grew up under wings of parents are suddenly left feeling like unknown guardians.

Too common

Those stories – some 420,000 Canadians over 65 years of age – are often in the background of the work of researchers and doctors. But says Bondar, "there is always a distance, so the burden of finding solutions doesn't become unbearable."

"We only live so long, so we want our work to count," she said of the research.

She appreciates the weight of time, not only because of its importance to patients and their families, but because it plays a part in the history of knowing the disease.

This year marks a century since the identification of Alzheimer's disease by Dr. Alois Alzheimer. Yesterday Bondar launched a public awareness project called Mission for Memories, which not only marks the milestone, but highlights important treatment advances.

Those diagnoses and treatments have largely taken place, not over 100 years, but in the last 20. The 1990's are thought of as the "decade of the brain," because of an increase in funding and research of diseases like Alzheimer's and Parkinson's.

Early diagnoses and treatment of Alzheimer's can help delay the symptomatic progression of the disease, but only continued research will find the causes and cure for the curse.

Dr. Sandra Black, head of neurology at Sunnybrook, and Women's College Health Science Centre - who went to school with Bondar - believes the Mission for Memories project may help push patients to earlier diagnoses.

One Ipsos-Reid survey, conducted last year, found nearly one out of every three Canadians identified at high risk for Alzheimer's disease had not consulted a doctor to ask about an assessment.

Only a few short decades ago, autopsies on the brains of elderly patients were not done. Alzheimer's was thought of as just the end result of growing old.

The ticking in our minds was a mysterious black box, even long after Dr. Alzheimer's discovery.

Mapping the brain

Now, says Canada's best known neurologist, the vastness of the brain is being mapped and charted and discovered like never before. That is what excites her enough to keep working on related science and serve as spokesman for the cause.

But there is another, more terrestrial reason she is on this new mission. While she doesn't want email from patients - preferring they contact the Alzheimer Society of Canada (alzheimer.ca) - she still gets them.

She knows, by the nature of her image, she represents more than just a doctor or clinical researcher.

To many victims and their families, she acknowledged yesterday, she is seen as hope and possibility when so much else is fading away.

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