Working (small) Miracles

OCCUPATIONAL THERAPY STUDENTS LEARN HOW TO HELP BRAIN INJURED

DR. DEIRDRE DAWSON AND ALICIA TOUGH

AT BAYCREST, OCCUPATIONAL THERAPY WORKS small miracles that make big differences in people's lives – seemingly simple things like overcoming the effects of a brain injury well enough to plan a wedding or take public transit again after 20 years of not being able to visit family outside the city. These are just two recent examples of how occupational therapists are improving daily living for people who have suffered a brain injury or a stroke, or who simply need help coping with the cognitive changes that come with age.

Occupational therapy strategies are applied to a wide range of human activities, including work, relationships, personal care and leisure. Students who train in the discipline at Baycrest learn about their profession as it applies, in particular, to brain function. The therapists often work with people in their own homes or other familiar environments, where they learn best. For instance, in one of the examples above, the therapist travelled with the client as he re-learned how to use the transit system.

Each year, Dr. Deirdre Dawson, a senior scientist with Baycrest's Kunin-Lunenfeld Applied Research Unit, takes several OT masters students under her wing and supervises the research project they are required to complete. An associate professor in the Department of Occupational Science and Occupational Therapy at the University of Toronto, Dr. Dawson's own research focuses on traumatic brain injury and stroke as well as brain changes that come with normal aging.

"One of the cognitive problems that is associated with traumatic brain injury and stroke is executive dysfunction (a reduced ability to plan and organize tasks and monitor progress)," Dr. Dawson explains. "Even for people who are aging normally, multitasking, an executive function, becomes harder – it is harder to get a meal ready for eight people, for instance. So I started working with an intervention that teaches people to apply an explicit strategy for the task they are having difficulty with. We teach them to first set a goal, then plan the task, do the task, and check their progress along the way.

"For people with executive dysfunction or age-related executive changes, these steps are less automatic – by making them explicit we have had really good success in the work we've been doing. People are making significant changes in their daily life and in their community."

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Alicia Tough, an OT student who is about to graduate with a masters degree, is particularly interested in the connection between occupational therapy, brain injury and neuroscience. Her research project at Baycrest – supervised by Dr. Dawson – looked at strategies that adult caregivers of young adults whose brains have been damaged by an injury, (a motorcycle or skiing accident for example), used to cope and manage the changes in their lives.

Parents of these brain-injured young adults, who may have been planning their retirement, suddenly found they were back caring for a dependent child. An occupational therapist may help them find time for themselves so they can move forward, connect them with places their adult child can go to give them respite from around the clock care-giving, and provide them with problem-solving strategies for dealing with their young adult.

Tough says she values her training at Baycrest because it taught her about the research process – how a lab works, what the different roles are, and so on. "And working with Dr. Dawson, I got to see the rigour and care she puts into her work. She is also very nurturing of the students that work with her, like encouraging me to continue on to a PhD."