

## ♪ MUSIC, MEMORY, AND DEMENTIA ♪

A casual conversation led to an award-winning article on music and memory and a new line of research for an interdisciplinary team at Queen's University. Lola Cuddy (Psychology) is an expert in music perception. Her work focuses on the nature of musical understanding and its location in the brain. She has used a variety of standardized tests to investigate the loss and recovery of musical abilities in people who have suffered brain damage, such as strokes. She described this research to hematologist-historian Jackie Duffin (Health Sciences) who asked what cognitive neuropsychologists had to say about the ability of people with dementia to remember music preferentially.

It turned out that little had been published on the matter, although many families know that people with dementia often respond positively to musical events. With the consent of family, the team tested a woman in the Kingston area, whose severe dementia had not hampered her recollection and enjoyment of music. Basically, the tests entail playing phrases of familiar or unfamiliar tunes and simply observing the reaction. When the tune was familiar, she smiled and sang along, often continuing when the cue had stopped. Her score was virtually equal to those of the normal controls.

This single observation implied several exciting things. First, it revealed that people with dementia can participate in music testing. Second, it suggested that correlation of the preserved musical memory with the sites of brain damage might eventually help to identify brain regions responsible for normal musical memory. Third, it could also contribute to our knowledge of dementia itself. Finally, it provided an explanation and an incentive for the role of music in the palliative therapy of people with dementia and their caregivers. In 2005, the team published these observations in the journal, *Medical Hypotheses*.

To their great surprise, their *Medical Hypotheses* article won a prize. The media buzz led to radio interviews, which then resulted in a little flood of messages, from the Yukon to the Maritimes, describing people with dementia who still enjoyed musical memories.

Now supported by a grant from the Grammy Foundation, the team includes faculty in geriatric medicine and graduate students. They have developed new tests that need to be standardized on normal people as controls and they are seeking more volunteers among the Alzheimer community to participate in the studies.

***For more information about participating with no obligation,  
call Cassandra at Dr. Cuddy's office***

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***Please leave a message and your call will be returned.***