

Local students leave legacies fighting for change in health, animal welfare



Last year, Michaela Morra watched a loved one slowly lose his life to the ravages of dementia.

First, it was the little things, then he was unable to recognize his family. Soon, he was unable to take care of himself and had to move into a nursing home.

As hard as dementia is for the patient, it is also painful for family members left behind ? but inspired by her uncle's illness, the Grade 12 Aurora student set out to learn more and make a difference for others living with the same affliction.

Morra's 'Music Can Awaken the Brain' took home top honours in a pitch competition hosted by Pickering College. A student at the Newmarket independent school for more than 14 years, Morra's project was part of her Capstone Project, an integral component of Pickering College's (PC's) Global Leadership Program, which tasks students with identifying a wide-reaching issue and looking for practical solutions.

Music Can Awaken the Brain was focused on 'improving quality of life for dementia patients using music therapy, by developing a sustained music therapy student volunteer program where they create music playlists on donated devices that stay with patients.'

'I wanted to understand more about the illness, so in Grade 11 I chose to study dementia in my Sociology, Anthropology and Psychology class and discovered the benefits of music therapy in improving the quality of life of those living with dementia,' Morra explains. 'The research I found showed that it reduced agitation, depression and the use of anti-psychotic medication.'

'I also discovered a barrier that using music therapy has to healthcare costs: purchasing the devices, whether it is MP3 players or headphones, and the labour that nurses or people at the hospital would have to upload a 100-song playlist to their devices, which took me roughly 2.5 hours to do per device. My action plan was to create a volunteer program at my school whereby students would have a donation drive for devices, partner with healthcare professionals working with dementia patients living in the community, in order to obtain information to create a personalized playlist and deliver it to the individual.'

Some of the music that particularly struck a chord with patients were tunes with a special resonance for the listener, including melodies they heard when they were in their youth and even to songs played at their weddings.

'I reached out to community organizations and local hospitals to see if anyone would be interested in my volunteer program,' says Morra. 'The pandemic kind of caused a halt to the operation, but I was able to trial the process myself as well as partner with the hospital and other volunteers I had. The feedback was incredible: for the patients, it reduced agitation, depression, and the intake of

anti-psychotic treatments and it increased their food intake, which surprised me.

?The main thing [the volunteers] said was it was a very rewarding process knowing that they potentially helped a person with dementia improve their quality of life in our own community. I will always hold that to my heart as I move off to university [to pursue] science, whether it is health care or more psychology-based. I feel I am definitely going to always take this with me and I am going to get devices and upload them throughout the summer and get them into hospitals.?

Fellow Grade 12 student Emma Zhang also intends to pursue a post-secondary career in the sciences this fall.

Zhang's Capstone Project was a finalist in the same Pitch Competition, but her focus was both athletic and environmental. In her ?Save the Geese, Save the Food Web? project, Emma created an art piece using 1,630 broken feather birdies used in badminton gameplay to spread awareness of the fact these feathers are plucked from live fowl.

?My project is trying to allow more people to use plastic birdies rather than feather birdies,? says Zhang, an Aurora resident and badminton player herself. ?I have played with feather birdies for 11 years and I realized I needed to change when I stepped on a feather that was hit off the birdie, slipped on it, and sprained my ankle. It gave me time to think: why are there so many feather birdies on the ground? People know that those feathers are made of goose and no one is realizing how severe the problem is.?

Through the collection of 1,630 broken birdies, Zhang created one large birdie designed to raise awareness of alternatives.

?Plastic is still polluting the environment, but feather birdies are hurting the geese, who are alive when the birdies are produced,? she says.

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