Music: A Gateway to Health

The universal language reaches children with autism

The Mount Sinai Adolescent Health Center has teamed up with Music for Autism to provide music education and therapy programs for youngsters with autism and other special needs.

Music for Autism (MFA) began in the United Kingdom in 2002 when Robert Accordino, now a second-year medical student at Mount Sinai, was a graduate student at Oxford University and helped launch the program. MFA was so successful that in January 2007, Cherie Booth, wife of former Prime Minister Tony Blair, honored MFA for its service to autistic patients and their families.

Soon after meeting Ms. Booth, Mr. Accordino met Angela Diaz, MD, MPH, Director of the Mount Sinai Adolescent Health Center, and discussed working together. To kick off the new partnership, the Center hosted a series of MFA concerts last fall and is currently planning additional events.

Dr. Diaz says the Center always strives to take a biopsychosocial view of health, which means offering a range of programs that tap into youngsters' interests and talents. "The outreach component of the MFA program will also help identify children with autism through better screening at the Center," says Dr. Diaz. "In lower socioeconomic areas, many children on the autism spectrum go undiagnosed and receive no help."

Although youngsters with autism struggle to communicate, music is a language that autistic individuals can enjoy. However, exposure to high-quality music, including classical music, can be a challenge in some urban environments. The Center sought a solution.

"The Mount Sinai Adolescent Health Center gave us a physical space for our concerts and we donated a piano to kick off our collaboration," says Mr. Accordino. "Unlike regular concerts, where everyone remains seated, MFA concerts are interactive, with dancing and moving in response to the music. The children and adults with autism are given an opportunity to conduct the music, as well as to play along with percussion instruments."

April is National Autism Awareness Month, and according to the National Institute for Mental Health, autism affects an estimated three out of every 1,000 children ages three to ten.

The causes of autism are not known, but a new Mount Sinai study suggests there may be a genetic basis. Research led by Joseph Buxbaum, PhD, Associate Professor of Psychiatry, found that a genetic variant may double the risk for autism. The research was published in the April issue of the *American Journal of Psychiatry*.

As researchers continue to investigate the biological roots of autism, individuals like Mr. Accordino are reaching out to those with the disorder and hopes that having MFA in the community will draw even more families.

Jen Brown with son Jake Hicks; Robert Accordino looks on.

"Our concerts at the Mount Sinai Adolescent Health Center," says Mr. Accordino, "provide a safe haven for those with autism and their families as well as a bright spot in their day."

> VISIT WWW.MUSICFORAUTISM.ORG OR CALL 877-863-7473 TO LEARN MORE ABOUT MUSIC FOR AUTISM AND UPCOMING CONCERTS AT THE MOUNT SINAI ADOLESCENT CENTER.

Cell Transplant Study (continued from page 1)

Dr. Olanow. "We now find that the dopamine cells were directly affected by the disease itself. These findings have important implications for the cause of Parkinson's disease. They argue against the theory that the disease is due to a single event like an infection, which then causes subsequent and progressive cell damage. Rather, these findings suggest that the course of the disease is ongoing and can damage newly implanted cells due to a process in the brain environment, rather than in the dopamine cell itself."

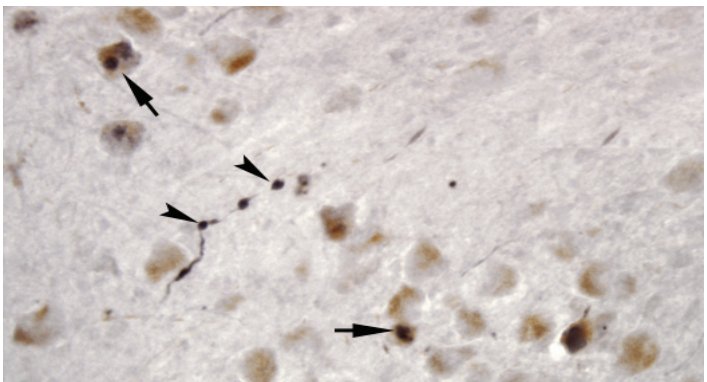
Researchers at Mount Sinai and at Rush University Medical Center in Chicago studied brain tissue from a patient who had received a dopamine cell transplant 14 years ago. The patient had improved after the transplant, but then deteriorated.

That deterioration may have been due to the fact that the transplanted dopamine cells were affected by the Parkinson's disease process. Implanted cells developed Lewy bodies—abnormalities that are characteristic of Parkinson's disease.

The postmortem tissue analysis also showed that the transplanted dopamine cells appeared to have stopped functioning normally, which may have limited their potential to provide benefit for Parkinson's patients, and may explain why the transplant studies failed. Dr. Olanow says these latest findings could have implications for future therapies, such as stem cell transplants and other cell-based transplant treatments.

Current treatments for managing Parkinson's disease include various medications and surgery, including deep brain stimulation. While these treatments are effective in controlling some symptoms of the disease, patients may eventually develop disabilities that are not helped by current therapies.

"While our results are disappointing in some respects, we have learned a great deal about the disease. This improves our chances of finding out why cells degenerate and helps us to develop treatments that can better protect them from degeneration," Dr. Olanow explains. "These findings do not mean that transplant strategies, such as stem cells, won't work in Parkinson's disease—they simply show us that there are additional obstacles that we have to overcome."



Arrows indicate Parkinson's disease-like pathology in grafted neurons.