



**01** Football player Darrian Seaton-Tucker says that the day his heart stopped mid-game, he'd been feeling "pretty good."

**02** Darrian and his mother, Leis Seaton, rejoice in the freedom the implantable defibrillator inserted by Dr. Michael Gollob has given him.

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# Coming back to life on the football field

How the Inherited Arrhythmia Program tackled Short QT syndrome for a young athlete

By Shelley White

**DARRIAN SEATON-TUCKER DOESN'T REMEMBER MUCH** about the football game he played right before his heart stopped beating.

It was October 2015, and the 16-year-old was a cornerback for Canada Prep Academy, a Welland, Ont., private boarding school for elite high-school football players. The team regularly travelled to the U.S. for road games, and that day they had a matchup in Princeton, N. J.

"It was just another regular game, I guess," says Mr. Seaton-Tucker, now 17, seated at the kitchen table in the Mississauga, Ont., home he shares with his mother. "I felt pretty good that day, to be honest."

From what Mr. Seaton-Tucker's been told, he played well on the field, but as he came in

after the game's final postgame huddle, he suddenly dropped to the ground and went into convulsions. Within moments he stopped breathing, and the opposing team's coach started CPR. Mr. Seaton-Tucker's heart had stopped by the time an ambulance arrived, and paramedics had to use a defibrillator to get it started again.

"They had to shock him a total of five times on the way to the hospital," says Mr. Seaton-Tucker's mother, Leis Seaton.

The ambulance took Mr. Seaton-Tucker to the Children's Hospital of Philadelphia, where doctors induced a coma for a week to stabilize his condition while they tried to figure out what was wrong. They knew Mr. Seaton-Tucker had experienced

cells. This condition could in turn lead to a risk of dangerous arrhythmias.

Mr. Seaton-Tucker was referred to Dr. Michael Gollob, a Cardiologist, Scientist and Chair of the Peter Munk Centre of Excellence in Molecular Medicine at the Peter Munk Cardiac Centre (PMCC). He's part of the internationally recognized Inherited Arrhythmia Program at the PMCC, one of the largest of its kind in the world, which sees more than 1,000 patients a year.

Dr. Gollob recommended Mr. Seaton-Tucker get an implantable defibrillator, which would protect him in the event of a recurring dangerous arrhythmia. The defibrillator would be surgically placed under his skin.

"[Mr. Seaton-Tucker] essentially died from this condition [at the game in Princeton], but fortunately received CPR and a 'shock' from paramedics to return him to life," says Dr. Gollob.

"The risk of recurrence of this sort of sudden event is high. There is no single medication proven to lower his risk. The condition is not influenced by diet, weight or exercise. The safest treatment is the placement of a defibrillator, which works by sensing his heart rhythm, beat by beat, and should it detect a deadly arrhythmia, the defibrillator will shock his heart to terminate that dangerous arrhythmia," says Dr. Gollob.

Ms. Seaton was unsure at first about her son getting the implantable defibrillator, but says Dr. Gollob explained why it was his best shot at preventing cardiac arrest and getting his quality of life back. At the time, Mr. Seaton-Tucker was required to carry a portable defibrillator with him at all times, as well as constantly have someone with him who was trained how to use it on him in case of another cardiac event.

"Darrian always had to be with somebody, and if you know my son, he gets in those moods where he's like, 'I want to shut everybody out and I want to be by myself.' So it was a real chore," says Ms. Seaton.

The procedure to implant the defibrillator was successful, and Mr. Seaton-Tucker relished his new-found freedom.

"The same day, his friend came

over, and Darrian said, 'Mom, please, just let me go. I will be right back; I just need a minute,'" says Ms. Seaton.

"It felt good to get out, but I was still very sore," adds Mr. Seaton-Tucker. These days, he says, he barely notices the implanted defibrillator at all. "Mornings sometimes I feel it, but other than that, I don't really pay attention to it."

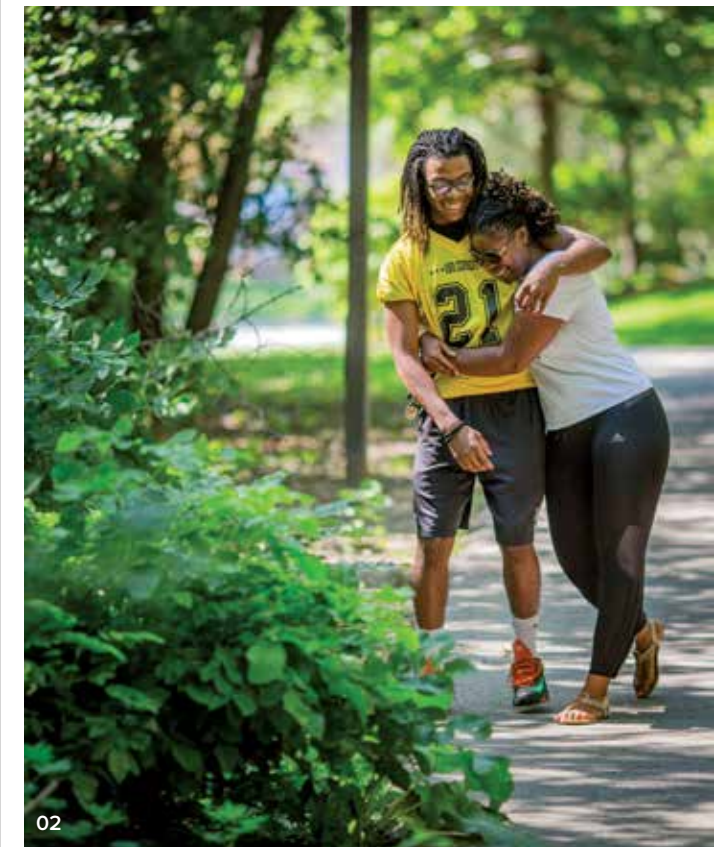
Mr. Seaton-Tucker graduated from the local high school in June, and now he's taking a year off before university, focusing on getting a part-time job and getting his body back in good physical condition. He says he wants to play football again in the future, although Dr. Gollob does not recommend it. "Due to the high physical impact from this sport, there is a significant

risk that he could damage his implanted defibrillator," says Dr. Gollob.)

"Right now it's my little nemesis," says Ms. Seaton of her son's wish to return to football. "My foot is totally on the brake. If it were up to Darrian, he would be like, 'I'm just going to check out the field, see what it's saying,' but he needs to just walk a little bit, just take it easy."

Regardless of what the future holds, Mr. Seaton-Tucker says that his experience with SQTS has profoundly affected him and made him realize how precious life really is.

"It's true when they say life is very short and it can be taken away very fast," he says. "So I guess that is one of the positives I've gotten from this experience." ▾



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Dr. Michael Gollob