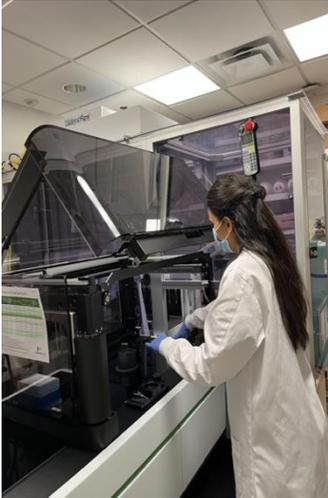


Heart-in-a-Dish Newsletter - December 2022

As we approach the end of 2022, we want to *thank you* again for participating in the Courtois Cardiovascular Heart-in-a-Dish (HID) project and provide you with an update on some remarkable milestones.

To date, we have enrolled 260 participants in our project. Our research team has been able to isolate white blood cells from several participant blood samples, turn them into stem cells (iPSC) and successfully develop these cells into beating cardiomyocytes, known as Heart Muscle Cells. This is a precise and lengthy process which takes a period of three months.



We are pleased to announce that through a generous donation from the Courtois Foundation, Dr. Cecere's lab purchased a cell incubator used to grow cells in conditions that partially mimic the human body with regulated temperature and oxygen levels. Dr. Hébert's team received funds for a state-of-the-art automated high-content fluorescent microscope allowing researchers to add drugs to cells and measure changes in real-time, as shown on the left. A liquid nitrogen tank was also purchased to ensure that all cells are safely preserved for long-term research, as shown on the right. This equipment will assist in facilitating and accelerating our research,



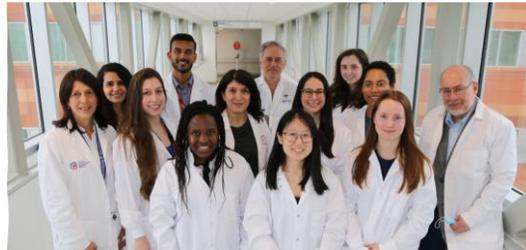
This fall, our research team was interviewed and highlighted on CBC and CTV news, CJFM radio and local newspapers, providing information to the public on our innovative research and achievements. We are thankful to Mrs. Steinberg, a participant who has made a generous donation to our project's ongoing funding needs.

We are proud to announce that we have recently launched our Heart-in-a-Dish webpage, accessed through the cvsignature.ca platform. Interview videos with Dr. Giannetti, Dr. Cecere and Dr. Hébert can be viewed on the website <https://cvsignature.ca/research/heart-in-a-dish/>

We encourage you to visit this webpage as it pertains to *your* participation in this project, and without your kindness and willingness to be involved and give back to research, this project would not be possible.

Our team continues to work diligently, attempting to identify how the heart muscle cells react to treatments and how patient treatment can be improved and better managed. We thank you kindly and will provide you with new developments as they evolve.

On our team's behalf, we wish you a Happy New Year.



Best Wishes for 2023!

