

## **OUR RESEARCHERS | DR. MORGAN FULLERTON**

Thank you for your generosity. Diabetes Canada is grateful to our donors for supporting critical research that will end diabetes.

Through your support, Dr. Morgan Fullerton, associate professor and director, Flow Cytometry and Virometry Core at the University of Ottawa, is bringing us one step closer to better treatments for people with type 2 diabetes.

In healthy individuals, blood sugars are controlled by a hormone called insulin, which lowers blood sugar levels. Insulin is produced by cells in the pancreas called beta cells. For people with type 2 diabetes, they can no longer produce or use insulin to control their blood sugars, which can lead to health complications such as nerve damage, blindness, heart disease, kidney failure, anxiety, amputations, and even death.

Dr. Morgan Fullerton's research has uncovered that when his team block certain beta cell processes, the cells release more insulin, which lowers blood sugar levels.

Diabetes Canada's funding will enable Dr. Fullerton to:

- 1. Understand how more insulin is released when they block these processes in the beta cell.
- 2. Identify drugs that may be able to target this.
- 3. Test whether beta cells that have been treated with these drugs can lead to better control over blood sugar levels.

By understanding how these cell processes affect insulin release, Dr. Fullerton hopes to leverage existing therapies to help combat and treat type 2 diabetes.

Thank you for giving hope for a healthier future to people with type 2 diabetes.