

## **OUR RESEARCHERS | DR. HERBERT GAISANO**

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

Through your support, Dr. Herbert Gaisano, professor, Departments of Medicine and Physiology at the University of Toronto, is bringing us one step closer to treating a condition related to type 2 diabetes – fatty liver disease.

In healthy individuals, blood sugars are controlled by a hormone called insulin, which lowers blood sugar levels. For people with type 2 diabetes, they can no longer produce or use enough 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. Type 2 diabetes is caused by several different risk factors including weight gain and obesity, and accounts for 90% of diabetes cases in Canada.

Diabetes can lead to fatty liver disease, which affects 30% of Canadians. If untreated, this disease can lead to severe liver damage, liver cancer, and liver failure.

Dr. Herbert Gaisono has developed a unique technology platform that he will use to test new drug treatments for fatty liver disease. By using liver samples taken from people with fatty liver disease, he can create a preclinical model to conduct these tests and determine if drugs currently used to treat type 2 diabetes can also be used to treat fatty liver disease.

Thank you for giving hope for a healthier future for people with type 2 diabetes and fatty liver disease.