

Dr. André Carpentier



COMPLICATIONS | CLINICAL RESEARCH

Project: How abnormal function of fat tissue in type 1 diabetes contributes to fat in the liver

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

Through your support, Dr. André Carpentier, Director of the Diabetes, Obesity and Cardiovascular Complications Research Centre at hospitalier universitaire de Sherbrooke – Université de Sherbrooke and Canada Research Chair in Molecular Imaging of Diabetes, is bringing us one step closer to preventing complications in people with diabetes.

Metabolic dysfunction-associated steatotic liver disease or MASLD is a serious condition that affects liver function and contributes to diabetes complications including heart, kidney, and eye diseases. It is caused by the release of excess fat from fat tissues that then builds up in the liver. MASLD usually occurs in people with abdominal obesity and diabetes.

For the first time, Dr. André Carpentier and his team will use unique medical imaging methods to measure fat release from fat tissues and liver fat metabolism in men and women living with type 1 diabetes. The team will seek to understand the role of fat tissue insulin resistance in liver fatty acid metabolism. They will compare these results with results from people without type 1 diabetes, to better understand how and why MASLD occurs in people with diabetes and abdominal obesity.

This will lead to better ways to prevent MASLD and other diabetes complications.