



## Research project summary

# Microparticles in Diabetes

- Principal Investigator: Dylan Burger
- Awarded \$685,440 from the Canadian Institutes of Health Research (CIHR) in May 2017
- Summary reproduced from the CIHR website in the language provided

People with diabetes are far more likely to suffer a heart attack than nondiabetics. Diabetes causes changes to the blood vessels and this is believed to be responsible for the increased risk of heart attacks and stroke. This project seeks to expand our understanding of how diabetes causes damage to the blood vessels. Microparticles are tiny pieces of cells that are released from dying cells in the body. Recently it has been found that the levels of microparticles in the blood are increased significantly in diabetes. Increased microparticles can predict a risk of a heart attack or death due to heart problems. The goal of this project is to determine how microparticles are formed in diabetes and how they may cause damage to blood vessels. We anticipate that by understanding the proteins carried by microparticles and the signaling that microparticles activate in diabetes we will be able to develop new drug treatments that can be used to reduce risk of heart and kidney problems in diabetes.

[Back to summary of all grants awarded to The Ottawa Hospital in this competition \(May 2017\)](#)

