



Diabetes Research: [British Columbia](#)

Since 1971, Diabetes Canada (formerly the Canadian Diabetes Association) has proudly supported outstanding diabetes research in Canada, administering more than \$140 million in research grants, awards and partnerships to scientists and clinicians who have dedicated their careers to the fight against diabetes.

Since Banting and Best's discovery of insulin in Toronto, in 1922, Canadian researchers have made huge strides and key advances in mapping and understanding the physiology, biochemistry and genetics of diabetes. This is why we choose, each year, to fund Canada's most renowned researchers in their quest for new and innovative developments in the prevention, treatment and management of diabetes. And although the research is diverse in its scope, covering a broad range of specialties and topics, the underlying goal of each study remains the same - to improve the quality of life of people living with diabetes and to find a cure.

Every year, our researchers continue a tradition of innovation and discovery. Below is a list of the scientists and clinicians in British Columbia who are currently funded by Diabetes Canada.

Research Grants & Awards

[Dr. James Johnson \(Diabetes Investigator\)](#)

University of British Columbia (Vancouver, BC)

Funded: 2017-2022

Title: Mechanisms enabling survival of stressed beta cells

Type 2 diabetes occurs when the number and/or function of insulin secreting pancreatic beta cells is not sufficient to meet the demands of the body. Since starting his own laboratory 13 years ago, Dr. Johnson has dedicated significant effort to uncovering the ways by which pancreatic beta cells are harmed in type 2 diabetes and ways that they could be protected. This study seeks to identify new ways that beta cells protect themselves when the production of insulin itself becomes too difficult. His preliminary experiments point to a new mechanism that has not yet been studied in beta cells. It is hoped that his

research will permit a more complete understanding of beta cell protection and that such information could be harnessed therapeutically.

Dr. Sean Locke (Post-Doctoral Fellowship)

Supervisor: Dr. Mary Jung

University of British Columbia-Okanagan (Kelowna, BC)

Funded: 2016-2019

Title: Changing cognitions to change behaviour: Reframing biased thinking to improve exercise adherence in individuals with prediabetes

Exercise can help prevent type 2 diabetes, but it can be very difficult to maintain an exercise routine, especially for people who don't believe that exercise will help them or don't believe that they can stick to an exercise routine. Dr. Locke is going to test a "reframing" counselling session to help mentally prepare people to start an exercise routine, followed by four weeks of community-based exercise counselling. Dr. Locke wants to know if these two interventions together can help people keep up with an exercise routine, and lower their risk of developing type 2 diabetes.