The discovery of Insulin is one of the largest scientific and medical discoveries ever executed on Canadian soil with Canadian researchers. The country and the world greatly benefitted from this discovery and it is still relevant today.

1. Insulin changed a disease that would normally be terminal into something manageable.
2. The research was conducted by Canadian researchers at the University of Toronto. This helped to put Canada on the map for scientific research (Nobel Prize)
3. “The discovery of insulin provided a boost to medical research in Canada, as patent royalties from insulin funded new facilities and research programs. Arguably one of Canada’s greatest contributions in the area of medical research, the discovery of insulin completely transformed the treatment of diabetes, saving millions of lives worldwide.”

Insulin changed a disease that would normally be terminal into something manageable. Many people have the ability to live their lives normally because of this discovery. In an interview with the Globe and Mail, Christine Turner said that “Type 1 used to be in the driver‘s seat, dictating what I could and couldn't do in my life; now Type 1 is in the passenger seat,” This shows the extent to which people would be restricted without using Insulin to treat diabetes. Most of the treatments for diabetes before Insulin were barbaric and ineffective in nature. “The Egyptians treated the condition by feeding sufferers earth and ground bones. Then there were the classics, such as bleeding, cupping and blistering. Then, when the importance of blood glucose became clear, there were low-carbohydrate diets and fasting diets, where children literally starved to death. But no treatment was effective until insulin.” This proves that before this discovery, people had to endure horrible treatments that often wouldn’t work (before insulin was discovered, there was no tested or always effective cure). Insulin has lessened the suffering of many people and even maintained their life expectancy to a normal rate.
/// The research was conducted by Canadian researchers at the University of Toronto This helped to put Canada on the map for scientific research. The discovery of insulin is one of Canada’s greatest contributions to medicine. The researchers opted not to gain anything financially because they thought that no

one should profit from saving lives. According to the Globe and Mail, “the researchers did not profit financially from their discovery. Rather, they sold the patent to the University of Toronto for $1, saying no one should profit from a lifesaving medication.” This shows that the researchers did not want to become rich from helping people and that they were simply conducting their research to help other people. The discovery of Insulin helped to fund many more research programs and facilities. The official Parks Canada website states “The discovery of insulin provided a boost to medical research in Canada, as patent royalties from insulin funded new facilities and research programs. Arguably one of Canada’s greatest contributions in the area of medical research, the discovery of insulin completely transformed the treatment of diabetes, saving millions of lives worldwide.” This shows that even though they could have made a lot of money for themselves from their discovery, the researchers knew that they should fund more research to improve people’s quality of life.

/// Frederick Banting was a man with a strong moral compass and was a very intelligent person. His experimental method of research was a major part of the project and he is one of the two researchers who is credited by the Nobel Prize commision for his discovery. Due to the significance of this discovery, the researchers won the Nobel Prize for Physiology or Medicine. In his acceptance speech, Frederick Banting, one of the researchers who discovered Insulin said “Insulin is not a cure for diabetes; it is a treatment. It enables the diabetic to burn sufficient carbohydrates, so that proteins and fats may be added to the diet in sufficient quantities to provide energy for the economic burdens of life.” This shows that Banting did not want to brand Insulin as something that it is not: a cure for diabetes. Banting’s experimental method is one of the main reasons that the Insulin producing islets were discovered. The Canadian Encyclopedia gives a detailed description of Banting’s method. “Banting’s reasoning was that possibly others had not been able to find the internal secretion in their pancreatic mixtures because it was being destroyed by the organ’s well-known external secretion, the digestive juices produced in its acinar cellular system. Perhaps if the flow of digestive juices out of the pancreas could be stopped by surgically blocking or ligating the pancreatic ducts, then the pancreas would stop producing its external secretion. Its acinar cells would shrivel up, but its islet cells, perhaps the source of its internal secretion, would keep on producing the substance. It could then be isolated and used to treat diabetes.” This shows the process that Banting went through in order to isolate the secretion of the islets which, when purified, would become Insulin. **///**