Medical research

By BRIAN LOCKHART

In December of 1903, Orville Wright climbed onto the lower wing of a primitive, sort of backward looking airplane, and managed to fly for 120 feet along the beach near Kittyhawk, North Carolina.

It was an outstanding achievement that ushered in a new era of human history.

In some places, and I was taught this in school, it is said the Wright brothers ?invented the airplane.'

While this dynamic duo of self-taught engineers managed to produce a heavier-than-air craft that launched under its own power, they didn't ?invent' the airplane

The concept of heavier-than-air flight had been on the drawing board for years, notably in Europe.

Air foils to create lift had already been designed and used to produce successful gliders, so the engineering concept of flight was already in the works. The challenge was to attach a workable engine that would turn a glider into a machine with sustainable flight.

The Wright brothers built on this knowledge of air foils, and managed to have their shop mechanic build an engine with an aluminim block that was light enough to be mounted on the airplane and powerful enough to provide forward movement.

They were clever men to achieve a dream, but they did it based at least partly on previous inventors' trials and errors.

Sir Frederick Banting, is revered in the world of medicine. He was the co-discoverer of insulin and as a result of his work and that of his colleague Dr. Charles Best, literally millions of lives have been saved.

However, Banting didn't just set up a Bunsen burner with a couple of test tubes and beakers in his laboratory one afternoon and decide it was time to find a cure for diabetes.

He became interested in the subject after reading articles and papers written about the pancreas when he had to give a talk on the subject to students at the University of Western Ontario.

A considerable amount of research had already been done on diabetes but many questions remained.

Banting took that knowledge and applied his own methods which were successful.

Prior to his discovery, the life expectancy of a person with Type 1 diabetes was usually only a few months.

Banting's first American patient, the 11-year-old daughter of the then U.S. secretary of state, would have died before her 12th birthday. Instead, she lived a full live thanks to Banting's discovery.

The important note of both of these great events is the fact that they both became possible due to previous founding research.

Very few, if any, really important discoveries or inventions came from a ?eureka' moment or after being conked on the head by an apple falling from a tree.

Although the modern microwave oven was invented when an engineer realized the chocolate bar in his pocket melted when he was working with microwaves. Even then the microwaves were already in use, he just applied it to cooking and the age of fast heated

food was born.

The research done by medical professionals in our universities and hospitals has achieved outstanding advances in medicine over the years.

A recent report by Stats Canada says cancer is now the number one killer in Canada, replacing heart disease.

However, it also says that since cancer rates have remained steady, it is likely that advances in treatment of heart disease has caused it to slip into second place.

And that's all the result of research.

I wasn't all that long ago that the treatment for a heart attack was to have a patient rest, because there was little else that could be done. I've seen that first hand.

However, now there is a variety of methods doctors use to treat a patient having a heart attack and with great success.

And all those treatments have come through research.

Not everyone who graduates medical school sets up shop with a doctor's office to treat patients.

Some people spend their careers doing research and pass on their findings to others who can expand on that work and eventually put new treatments into practice.

However it is a slow process that takes time and money.

Finding new treatments or discovering the key factors that cause disease, disorders, or conditions, takes patience, knowledge, and time.

But in the end it's worth it.

If you donate to an umbrella organization that funds research, you may not benefit from the results in your lifetime, but the next generation will, and the treatments available to you now, were funded by donations from years past.