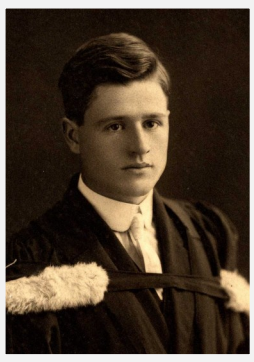
Dr. Peter Joseph Moloney: The Man and His Work

-O.B.E., Ph. D., LL.D., F.R.S.C.



-Banting Medal

-American Diabetic Assoc. Medal

-Charles Mickle Fellowship of University of Toronto Faculty of Medicine

-Gairdner Award

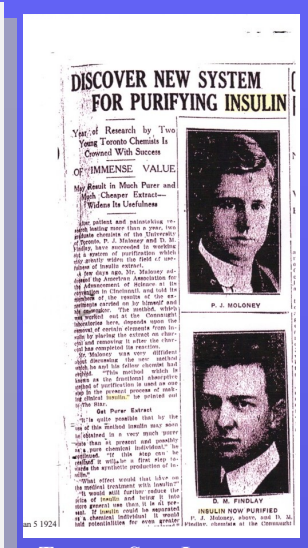
-Best Prize

-member of :
- -Am. Chem. Soc.
- -Can. Soc. Immunol.
- -Can. Fedn. Biol. Soc.
- -Can. Physiol. Soc.
- -Brit. Biochem. Soc.

-7 U.S. patents

-84 publications

Peter Moloney



DISCOVER NEW SYSTEM FOR PURIFYING INSULIN

Year of Research by Two Young Toronto Chemists Is Crowned With Success

OF IMMENSE VALUE

May Result in Much Purer and Much Cheaper Extract—Widens Its Usefulness

P. J. MOLONEY

D. M. FINDLAY

INSULIN NOW PURIFIED

Toronto Star January 5, 1924.

- drpetermoloney.com

"Dr. Moloney was probably the single most influential person in my life and I will never forget him."

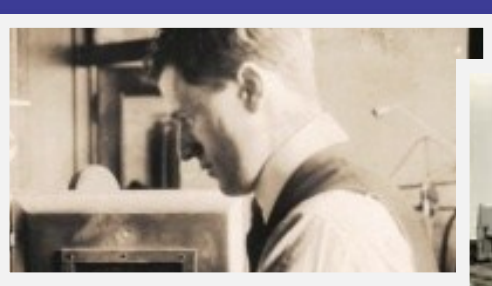
-Dr. Lou Goldsmith

On the web:

drpetermoloney.com

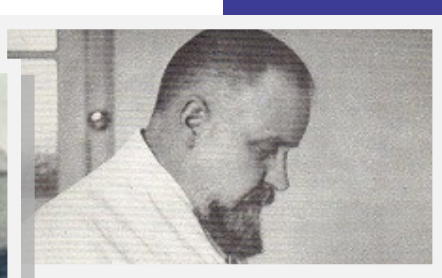
"In spite of the acclaim that he has received internationally for this work, he remains humble and unassuming. ... he continues his investigative approach to many medical problems with the enthusiasm of a man much younger. I am proud and humbled in having such a man as my Godfather."

– Dr. E. Peter McDougall, M.D., F.R.C.S.(C)



Dr. Moloney as a Ph. D. student 1921

"The Farm" Connaught Antitoxin Laboratories



Gaston Ramon, French biochemist, discoverer of diphtheria toxoid, lifelong friend of Dr. Moloney

Gairdner Award, 1967

"Most important of all, Peter Moloney was marked by faith – faith in his fellow scientists whom he defended consistently against accusations of in-fighting, faith in Canada, faith in his Church. Like the Louis Pasteur of legend, Moloney believed as does a Breton peasant. The even stronger faith of that peasant's spouse Peter Moloney willingly ascribed to his own wife, Angelina." –Msgr. Edward Synan, F. R. S. C.

August 2012

The Man and His Work

Dr. Moloney receiving the Gairdner Award from Governor-General Michener 1967

O.B.E., Ph. D., LL.D., F.R.S.C., Banting Medal, American Diabetic Assoc. Medal, Charles Mickle Fellowship of University of Toronto Faculty of Medicine, Gairdner Award, Best Prize, member of Am. Chem. Soc, Can. Soc. Immunol., Can. Fedn. Biol. Soc., Can. Physiol. Soc., Brit. Biochem. Soc., 7 U.S. patents, 84 publications

Dr. Peter J. Moloney

* Eminent Canadian Scientist of world renown
* Son of Irish immigrants, first biochemist hired by Dr. J. G. Fitzgerald, assisting biochemist with Banting and Best,
* Ph. D. in Chemistry, University of Toronto
* University of Toronto Professor, Biochemist with Connaught Labs.

Inside this issue:

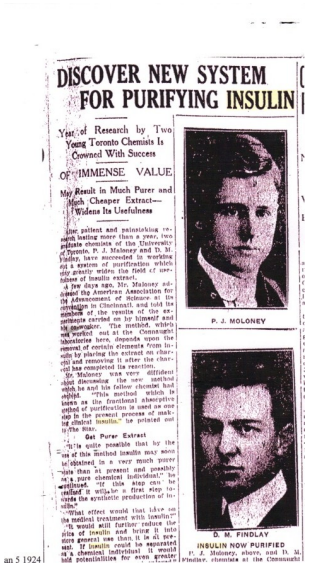
Interview: University of Toronto 1974

I remember on one occasion Banting came into the Lab to take blood from a rabbit which had been injected with insulin..."

Dr. Moloney was interviewed and recorded on tape recorder by Elizabeth Wilson of the University of Toronto Oral History Programme on January 21, 1974, when he was 83 years old. The original text including Dr. Moloney's editing is published here for the first time.

"...We developed *a method for the purification of insulin which came out of work I had done with hippuric and benzoic acids. In the hospital undesirable reactions were being induced by the insulin available and the method we had devised gave a better product. I suppose there were some* ***thousands of doses*** *of insulin purified by the benzoic acid method given*. It wasn't the best method but at the time it served a useful purpose."

-USMC Archives



DISCOVER NEW SYSTEM FOR PURIFYING INSULIN

Year of Research by Two Young Toronto Chemists Is Crowned With Success

OF IMMENSE VALUE

May Result in Much Purer and Much Cheaper Extract—Widens Its Usefulness

P. J. MOLONEY

D. M. FINDLAY

INSULIN NOW PURIFIED

Toronto Star January 5, 1924.

- drpetermoloney.com/Newspaper Archives

Biography by Msgr. Edward Synan, F.R.S.C. *Transactions of the Royal Society of Canada 1991/Series VI/Volume II*

"...From 1921 until 1963 diphtheria was among the objectives of his published research; with C. B. Weld he succeeded in producing the first diphtheria toxoid in North America and in devising a reliable reaction test, widely known as 'the Moloney Test". As a member of the Banting-Best team that developed the practical use of insulin against diabetes, Moloney contributed in 1923 a method of using benzoic acid for the concentration and purifying of insulin as well as a method of removing insulin from carbon, research done with D. M. Findlay 1923-1924. He had already received wide acclaim for his development in 1921 of a quick acting hydrogen electrode for determining the acidity of broths in connection with the culture of bacteria...."

Letters

Written by E. Peter McDougall, son of Donald McDougall who was a friend of Dr. Moloney, WWI veteran, blinded, went on to become a Rhodes scholar, Dr. Moloney taught him geometry on Saturday walks.

"Peter Moloney, a lifelong friend of my father, is my Godfather. My first recollections of him are as a young boy. I was always delighted with his visits to our house in Toronto, because he always presented me with interesting and intriguing mathematical puzzles to play with. ...My contact with Peter Moloney resumed after my childhood and University training in medicine when I returned to the surgical staff of St. Michael's Hospital. It was during my University days in medicine, that I first realized the magnitude of Dr. Moloney's contributions in my chosen profession. His achievements in the fields of the treatment and prophylaxis of tetanus, diphtheria, and diabetes have provided immense advancement in the treatment of these disorders. In spite of the acclaim that he has received internationally for this work, he remains humble and unassuming. ...

I am proud and humbled in having such a man as my Godfather."

-- E. Peter McDougall

-drpetermoloney.com/letters

"The hospital arranged through Dr. Moloney for me to be sent to Dr. E. P. Joslin, a world famous diabetic clinician in Boston."

-Michael O'Sullivan

Gaston Ramon

Gaston Ramon, who became a close friend of Dr. Moloney, discovered the vaccine for diphtheria at the Pasteur Institute in Paris in 1922. An authoritative biography of Ramon follows.

Dr. Moloney produced diphtheria toxoid, the very first production in the world, in Toronto at Connaught Laboratories. He also developed the Moloney test, similar to the Tuberculosis reaction test. Field tests in Canada from 1926 to 1931 showed the eradication of diphtheria. Ramon invited the Moloney family to dinner at his Villa near Paris in 1929, a property given to him by Empress Eugenie. Not far away was the home of Pasteur, and Ramon brought them to see Pasteur's laboratory and former home.

"Dans la glorieuse lignée des Savants qui, depuis Pasteur, ont illustré la grande Maison qu'il a fondée, Gaston Ramon occupe l'une des toutes premières places.

-Bulletin de l'Académie Nationale de Médecine (Tome 147, no. 29-30, 1963, pp. 610-620.)

St. Michael's Hospital, Toronto

Dr. Moloney was on the Advisory Board of St. Michael's Hospital for many years. Recollections of Michael O'Sullivan, Director of the S.M.H. Biochemistry Department 1941-1973 show how Dr. Moloney was the key figure in updating the laboratory from its unsatisfactory condition to a modern facility, which was a major factor leading to its prominence as a world class health facility.

Biochemistry Lab 1931

St. Michael's Hospital: Modernized Biochemistry Laboratory, 1954

-St. Michael's Hospital Archives

In Berlin 1914


BÖTTINGER STUDIENHAUS IN BERLIN
(DEUTSCHES INSTITUT FÜR AUSLÄNDER)

Teilnehmerkarte

Herr Peter Moloney

hat den Semester- Ferien- Kursus

vom 6. Juli 1914 bis

Der Direktor

Travel documents witness silently to Peter's presence in Berlin; his stay was to end with a rush to safety just days before hostilities began with declaration of war on August 4, 1914. Peter went there with Fr. Henry Carr, C.S.B., his lifelong friend, to improve his German. Having learned it during childhood from the Grawey family, he would eventually need formal training in order to be able to read German scientific publications.

One of the most notable British journalists of the time, Mr. H. W. Nevinson, was in Berlin for the London Daily News in the first days of August. Through his descriptions we participate in the times Peter experienced. Nevinson speaks of arriving the evening of July 31, and meeting many horse drawn wagons full of working men, cheering and singing as people do when war is coming. There was a chaos of crowds, people rushing home after summer vacations. For two days, he watched the Unter Den Linden, as crowds paced there singing German war songs: "Was Blasen die Trompeten", the finest, then "Deutschland, Deutschland ueber Alles", which came next, and "Die Wacht am Reine" which was most popular. Peter certainly saw and heard these events, his boarding house being 1 km from the travel office on Unter Den Linden, across the river, close to the Friedrichstrasse Bridge.

-drpetermoloney.com/In Berlin

Biography by Msgr. Edward Synan, F.R.S.C.

Peter Joseph Moloney was born in Penetanguishene, Ontario, on 29 June 1891; on 12 August 1989, he died in Toronto. When he was two years old his father purchased the Queen's Hotel in Powassan, Ontario, and moved his family to the town of which Peter was to say in an extreme old age, "I can almost claim to be still a citizen of Powassan."

His formal education began when he was five in Powassan's two-room two-teacher elementary school. Since the district was then without a high school, a local teacher conducted a "Continuation School" at which Moloney studied high school subjects. At sixteen he registered at St. Michael's College, Toronto. There he completed studies preliminary to matriculation and then passed into the degree programme of the University of Toronto as a member of one of the first St. Michael's classes to do so. After a course that honoured the arts of the quadrivium with physics, chemistry, biology, and mathematics along with those of the trivium, English, French, Latin and Philosophy. Moloney received his B. A. in 1912; he won the prize for mathematics and had played on a championship football team.

"Most important of all, Peter Moloney was marked by faith – faith in his fellow scientists whom he defended consistently against accusations of in-fighting, faith in Canada, faith in his Church."

-Msgr. Edward Synan, F.R.S.C.

-Transactions of the Royal Society of Canada 1991/Series VI/Volume II

Early Places of Work

Peter Moloney was the first chemist who was also a graduate of St. Michael's College, U of T. After being only a short time at Cutter Laboratory, Berkeley, Moloney decided to take the offer of a job at Ottawa, for the Government at the Experimental Farms. He went there in August 1916.

After working on the extraction of hippuric acid Moloney wrote to Eastman's looking for a job. They answered by phone saying they would be glad if he went. Moloney spoke of this offer to Prof. Lash Miller, who was much impressed by the hippuric acid work which Moloney had done, and called him pH Moloney because Peter had invented a new pH electrode. "Don't go to them", Miller said. "They'd steal the coppers off a dead man's eyes." Prof Miller phoned Sir John Eaton, but he had no job available. But he said, "There is Fitzgerald, he's looking for a man." Prof. Miller took Dad up to the old Faculty Club, in University College. Fitzgerald said, "Write me a letter", and then answered it afterwards by offering a better salary: $2000 as compared to $1200 at Ottawa. Taking Moloney on in this way, at Connaught Lab, Toronto, Dr. Fitzgerald asked: "What would you want in a chemistry laboratory?" "He was always good to me", Peter Moloney acknowledged later on, speaking of Dr. Fitzgerald.

- USMC Archives

Peter Moloney

The Man and His Work

Dr. Peter Moloney Family Trust
Contact us through our website at
http://drpetermoloney.com

In the race to find an anti-toxin for diptheria and a treatment for diabetes -- the heroic contributions of Dr. Peter Moloney, a man of faith in his scientific peers, his country, and his Catholic beliefs, whose life work of bio-medical purification has given a new lease on life to millions, should roll easily off the lips of school children across Canada.

Peter Joseph Moloney:
The Man and His Work
-The Book .....coming soon

Nobel prize winners for insulin, Drs. Banting and McLeod, owe special recognition to Dr. Peter Moloney, without whose successful large-scale purification technique of spring 1922, insulin would have remained unusable.

In the shadow of the 1923 Nobel Prize awarded to Banting and McLeod, key scientist Moloney made significant contributions: a man whose life's work of biomedical purification has extended millions of lives.

On the web:
drpetermoloney.com

Significance
Dr. Peter Moloney was a man of tremendous importance in the early years of Canadian biochemical development, and was responsible for many discoveries which have changed the course of history. Along with his great wealth of scientific knowledge, Dr. Moloney possessed a firm belief in his Catholic faith, which was crucial to how he treated his work, family, and scientific colleagues; as his profile in The Canadian Public Health Archives states, he was a man of "sterling character". To find a man who blended scientific dedication of such magnitude with an unshakable religious belief is truly inspiring.

Letters

From Lou Goldsmith, Monday, July 4, 2011:

"I was a graduate student with Dr. Moloney until I received my Ph. D. in 1955 "Chemical and Immunological Studies on Insulins". Recently I searched online for more information about him because I wanted to pass on to my children, grandchildren and great-grandchildren details about **the person that had played such an important role in my education and my life** while I can - am now 82 years old...

When I started working with him he asked me to read a book, I believe it was titled "Science is a Sacred Cow". Essentially it said-always seek proof-just because something is printed in a textbook does not mean that it is actually true. That principle and many others that I learned from him have guided me throughout my life. Even though I moved to the U. S. we corresponded until he passed away.

Dr. Moloney was probably the single most influential person in my life and I will never forget him."

-drpetermoloney.com/letters

Dr. Peter Joseph Moloney
C. 1940

Peter Moloney