

# The Influence of the Killam Legacy on my Career

by

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Izaak Walton Killam and his wife Dorothy Killam shared a strong, indeed passionate, commitment to use their wealth for the benefit of advanced study and research in Canada. Izaak Walton Killam died in 1955 at the age of 70 before they could bring their plans to fruition. Dorothy Killam died ten years later, but during those ten years she very carefully laid plans to realize the dream that she and her husband had shared. The legacy of the Killams is truly tremendous.

In her will, Mrs. Killam established endowments to help in building Canada's future by encouraging advanced study. She aimed "to increase the scientific and scholastic achievements of Canadians, to develop and expand the work of Canadian universities, and to promote sympathetic understanding between Canadians and the peoples of other countries".

Izaak Walton Killam was born in Yarmouth where he was a paperboy. I was born in Kelowna where I was a paperboy until just before I turned 15. Although Mr. Killam and I both worked as paperboys, the parallel in our careers ends there.

Prior to obtaining a paper delivery route, I sold newspapers in front of the post office. It was a hard way to make money. As I recall, I sold the Kelowna Courier for five cents a copy, of which two cents was pure profit. Rarely did I sell more than ten papers a day and most of those were sold to relatives or friends of my parents who felt sorry for me.

One day I learned that there was more money to be made by delivering the Vancouver Sun, which was an evening newspaper in Vancouver, but delivered the following morning in Kelowna. When I went to apply for a paper route, the manager of the delivery operation looked at me for a second or two and said that "the squeaky wheel gets the grease" and went back to barking commands at the paperboys. At ten years of age I was small for my age and I felt especially small that day and so I hopped on my bike and slowly pedaled home trying to figure out what was meant by his metaphor.

I had been challenged by metaphors from an early age. When I was about four, my parents and maternal grandparents travelled north to Vernon, a major trip in those days, to visit some relatives. As we returned home along a dark highway, my Grandpa said, "Ed, can you pull over a minute so I can water my pony", to which I am told I asked why Grandpa kept his pony out in the middle of nowhere. Given the fact that I was challenged by figures of speech when I was young, I can now appreciate why I struggled with Shakespeare in high school. Eventually, I realized that if I were

to obtain a paper route I would have to persevere. I went back to the paper shack every week until I got a paper route.

At the age of 15, Izaak Walton Killam joined the Union Bank of Halifax. He had a great entrepreneurial drive. If he had lived in Kelowna when I did, he would have obtained a paper route much faster than me and in a very short time he would have become the manager and started planning to buy the entire newspaper. He went on to have a very successful career as a financier and later he became a philanthropist. At the time of his death, he was the wealthiest person in Canada.

Just before my 15<sup>th</sup> birthday, we moved to the Vancouver area, where by circumstance I became more interested in academic matters. I did well at UBC and upon graduating in 1967 I was awarded an excellent scholarship by the National Research Council of Canada (NRC) with the condition that I had to pursue postgraduate studies at another university in Canada. It was Canada's centennial year and the country was celebrating like never before. I decided to go to Montreal, which was the centre of the party. In my first few weeks at McGill, I had the good fortune to meet Susan. We were married the following year. In 1971, Susan and I went to Oxford to do postdoctoral research. I was again fortunate to be supported by the NRC.

While we were at Oxford, it became apparent that the great expansion era of Canadian universities had ended and that the prospects of an academic career were slim. I did not know what I should do and so I wrote to Charles McDowell, the legendary Head of Chemistry at UBC who had nominated me for the NRC 1967 Science Scholarship that had led to Montreal. He wrote back and said that it was true that there were fewer positions than there had been in the recent past and that I would be in a better position to search for a position if I returned to Canada. He offered to nominate me for a Killam Postdoctoral Fellowship tenable at UBC and said I would have the freedom to continue with the research that I had started at Oxford. During my Killam Postdoctoral Fellowship, I published about eight papers, including a single author contribution to *Nature* in 1974, which likely had a huge impact on my future.

I held the Killam Fellowship from May 1, 1973 to April 30, 1975. While I was at UBC, I jogged two days a week with a group of postdoctoral fellows and young professors and I played volleyball two days a week. David Suzuki was in the same volleyball group. On May 1, 1975, I went to UBC as usual and realized that I had a problem: Susan was at home with our two very young children and we had no income for the month of May. When my friends came by just before noon and said, "Come on, Russ, it is a beautiful spring day for a run", I replied that I would catch up with them later. A short time later the telephone rang and I was offered a position at Dalhousie. I joined the Department of Chemistry on July 1, 1975. Thanks to the wonderful legacy of Izaak Walton and Dorothy Killam, I was about to realize my dream of becoming a professor in a respected Canadian university.

In the mid to late 1980s Dalhousie University appointed several Senior Killam Fellows. The Fellowship relieved mid-career professors of all teaching and administrative responsibilities for one year. Jan Kwak, the Chair of Chemistry at the time, nominated me for the Senior Killam Fellowship, which I held during the 1989-90 academic year. The Fellowship had a significant impact on my research career. In the years that followed the tenure of the Senior Killam Fellowship, I was able to attract more outstanding people to my research group, our productivity increased dramatically, the impact our publications increased correspondingly and international recognition came in many forms, including being the first Canadian to be elected to the Board of the World Association of Theoretical and Computational Chemists.

I have been fortunate to have had eight Killam Postdoctoral Fellows in my research group, four are tenured chemistry professors in Canada and three became professors in their home countries. I have not communicated with the eighth one since 2005, but I believe he is an active researcher. I have also had nine Killam Predoctoral Scholars as PhD students. Eight have completed their PhDs and like the Killam Postdoctoral Fellows have embarked on successful careers.

The generosity of the Killams has benefitted me in many ways. In fact, I would not be standing at this podium today, if it were not for the Killams. The Killam legacy made it possible for me to build an international reputation in the field of computational chemistry. Furthermore, several of the Killam scholars who spent time in my research group have gone on to become international leaders in our field. In closing, I note that Izaak Walton Killam gave anonymously to charities throughout his lifetime. I suspect he never forgot that he had been born in modest circumstances in Yarmouth and wanted to use his wealth to improve the lives of others and to make Canada a better country. The Killam legacy, Dalhousie University and Canada have enabled me to enjoy a great career, but if I could have taken a different path, I might have chosen to be a philanthropist, provided that I had lots of money to work with.