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He almost failed in Chemistry but later was awarded with Nobel for drug discovery

Highlighting the snapshots of lives of Nobel laureates in the form of small, interesting yet motivating stories was the idea behind starting this section of BioNE. Sticking to the main theme, we are bringing to you another wonderful story from the biography of an eminent scientist, Dr. William C. Campbell. He was jointly awarded with the Nobel in Physiology and Medicine in the year 2015 with Dr. Satoshi Omura from Japan for discovery of a novel anti-parasitic drug Ivermectin.

William Campbell was born in the year 1930 in the Londonderry city in Northern Ireland in UK and was raised in Ramelton town in Ireland. His father R.J. Campbell was a farm supplier and had very little of formal education. Young William started schooling in the nearby school of Ramelton town and stayed there till the age of 13. He then moved to a boarding school at Belfast in Northern Ireland named the Campbell College. Physics, Chemistry, Biology etc. were the different subjects he studied in school. He was fond of Biology but was not good in Physics and Chemistry. After completion of his education in the Campbell School, William moved to the Trinity College in Dublin. His fear for Physics and Chemistry kept on bothering him even in college. William Campbell mentioned that in Trinity College, the pass mark for Chemistry was 40 percent, but he could get only 39.7 percent, which was then rounded up to 40 percent as per the policy of the college. He fondly remembers this last encounter with Chemistry as a student which he could fortunately pass. Because of his deep interest and performance in Zoology, William Campbell could graduate from the college securing first class honours in the year 1952.

As a student in high school and in college, William Campbell got the opportunity to deal with parasitic worms of animals, which always attracted him. His interest in parasite biology continued and he obtained a PhD in the year 1957 from the University of Wisconsin. After PhD, till 1983, William Campbell worked in different organizations in various capacities to finally join Merck Institute for Therapeutic Research as a senior scientist in the year 1984. In Merck, he was working closely with a group of brilliant chemists while looking for a new drug to treat helminthic infection. Naturally, this work had a lot to do with chemistry and this is where he recounted his experience with chemistry in college. Campbell's work in Merck and in Cambridge as a visiting researcher along with the contribution from Dr. Satoshi Omura could gift the world with a wonder molecule in the treatment of parasitic infection, named Ivermectin in the year 1978. Their research for the discovery of Ivermectin could bring in a dramatic change in the treatment of Onchocerciasis or River blindness in human by directly impacting the lives of millions of people living in the Onchocerca endemic areas of Sub-Saharan Africa, Latin America and the Middle East. This landmark discovery was honoured by the most prestigious Nobel Prize in Physiology and Medicine in the year 2015.