

Har Gobind Khorana

Har Gobind Khorana (1922 -)

Har Gobind Khorana was born in Raipur, Punjab, (now in Pakistan) on 9 January 1922. His father was a patwari, a village agricultural taxation clerk in the British-Indian system of government. Har Gobind did his schooling from the D.A.V. High School in Multan. He received his B.Sc. and M.Sc. degrees from the Punjab University in Lahore. Khorana lived in India until 1945, when the award of a Government of India Fellowship made it possible for him to go to England and he studied for a Ph. D. degree at the University of Liverpool.

Khorana spent a postdoctoral year (1948-1949) at the Eidgenössische. Technische Hochschule in Zurich, and then joined Cambridge University, England in 1950, where he worked with Professors G.W. Kenner and Lord A.R. Todd. In 1952 he went to the University of British Columbia, Vancouver, Canada. The British Columbia Research Council offered at that time very little by way of facilities, but there was 'all the freedom in the world', to do what the researcher liked to do. He became the Alfred Sloan Professor of Biology and Chemistry at the Massachusetts Institute of Technology in 1970 and is at present an Emeritus Professor at the Department of Biology at MIT.

Dr. Har Gobind Khorana shared the Nobel Prize for Medicine and Physiology in 1968 with Marshall Nirenberg and Robert Holley for cracking the genetic code. They established that this code, the biological language common to all living organisms, is spelled out in three-letter words: each set of three nucleotides codes for a specific amino acid. Dr. Khorana was also the first to synthesize oligonucleotides (strings of nucleotides). Today, oligonucleotides are indispensable tools in biotechnology, widely used in biology labs for sequencing, cloning and genetic engineering.

Khorana has won many awards and honors for his achievements, amongst them the Padma Vibhushan, Membership of the National Academy of Sciences, USA as well as a Fellow of the American Association for the Advancement of Science.