The Path to the Nobel Prize

The tale of the journey of a Nobel Laureate from "The Thread of Life" to a well-knit, shining career as a pioneer of bioinformatics

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Sir Richard J. Roberts

New England Biolabs, Inc.

1993 Nobel Laureate in Physiology or Medicine

(the Nobel Prize was awarded for the discovery of introns in eukaryotic DNA and the mechanism of gene-splicing)

In this talk, I will briefly describe how I became interested in science and how I almost became a professional billiards player. Following my early interests in mathematics and some thoughts about becoming a professional detective, and later my pursuit of a Ph.D. in chemistry, I became fascinated with biology and read a book, "The Thread of Life" by John Kendrew that led to my becoming a molecular biologist. I will describe the research that led to **the discovery of RNA splicing**, which turned out to be a temporary diversion from my real interests in DNA restriction and modification, and bioinformatics. With a keen interest in sequencing DNA, I became heavily involved in using computers, and was a pioneer in what is now called bioinformatics. In the RM field many discoveries have been made including, most recently, some exciting findings on bacterial methylomes.

My career has spanned traditional academic research to more commercially inspired ventures. Since I now work at New England Biolabs, a for-profit company, I will describe its origins, its philosophy towards business and life, and how commercial success can fund innovative research. One theme running through my career has been a lack of respect for dogma and a keen sense of questioning everything that people tell me they already know. I will also highlight the importance of luck in shaping a career.



Jointly organized by Savitribai Phule Pune University National Centre for Cell Science National Centre for Cell Science