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How I became what I am

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I was born into a highly educated family in Kolkata on a cold December afternoon, the only child of Drs Maya and Girindranath Mitra. The doctor had wrongly pronounced me dead, even before I could see the light of the day. But luckily for me, I lived. My father was an agricultural scientist with the Indian Council of Agricultural Research. My mother was a professor of Botany at Bethune College in Kolkata – a leading women’s college from where the first women of the British Empire graduated. Whatever I am today, I owe it to my mother’s untiring efforts and continual sacrifice.

From her childhood my mother rebelled against the concept of preference for a male child that was prevalent in those days. She had the ambition to finish college, and she eventually obtained a Ph.D. in 1960 – also receiving the Agarkar gold medal of the Calcutta University in 1962, with a paper in the journal *Nature!* Setting aside such a promising research career, she decided to marry and raise a family.

I grew up with a working mother when that concept was still uncommon in Kolkata. However, I recall that my mother made every effort to spend quality time with me, and with her encouragement and support, I grew up in a healthy educational environment. My father’s career at ICAR meant that he spent much of his working life outside Kolkata, in Shillong, Cuttack, and Hyderabad. Under this circumstance, my mother took care of my education as well as all other needs. My mother also took me along to her numerous botanical excursions. We traveled along the length and breadth of our magnificent country, getting acquainted with its rich and diverse history, vegetation and topographical regions.

My father suddenly passed away at the age of 53 years, and the

entire responsibility of the family shifted onto my mother. She inspired me to appear in the National Talent Search Examination, conducted by the National Council for Educational Research & Training. I was awarded the NTS scholarship, and it continued right up to my Master's level. I completed my Ph.D. in Computer Science in 1995 at the Indian Statistical Institute, under the supervision of the eminent scientist Prof. Sankar K. Pal. He has been another major inspiration in my professional career.

I have been working in ISI since 1991, publishing extensively and rising up the academic ladder right upto the level of a full Professor. My mother would often urge me to explore the possibility of merging Botany with the Informatics – and this is what I am doing in the integration called Bioinformatics! I only wish she were beside me today to share the joys of my professional domain. The logistic support provided by my mother helped relieve a lot of the burden of childrearing and allowed me to concentrate on research. It provided important emotional support to my daughter as well. My mother passed away almost suddenly in the summer of 2006. A part of me perished as well. Keeping in mind her happiness whenever I performed well in my profession, I believe I should continue with my work in fulfilling her goals.

My work on neuro-fuzzy computing has been internationally acclaimed, leading to several fellowships. I have written several books – Neuro Fuzzy pattern recognition: Methods in soft computing, Data Mining: Multimedia, Soft Computing, and Bioinformatics, and Introduction to machine learning and Bioinformatics. I am also associated in the editorial activity of several international journals, and worked as the programme chair of many international conferences.

I have not faced gender discrimination in any phase of my education and/or professional career. Wherever I went, I have always been a vocal proponent for women's causes. My mother has been a powerful influence in my life in this direction. She had dared to think differently. It is because of women like her, who walked before us, that we are able to achieve what we want with relative ease. Today, I strive to bring up my daughter by imbibing in her a similar conviction.