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## Believing in myself

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I was born in a joint family. Being the youngest member I received a lot of care and attention. My parents, both teachers at that time, inculcated in me the love for science and literature. I was told that there was a long debate over the choice of my school which related to the medium of instruction. I finally went to a convent school. My parents and my eldest uncle (who played a major role in shaping my career) were keen that I maintain my marathi roots. My mother took extreme care to teach me Marathi although I was attending an English medium school and this gave me the advantage of reading books in both the languages. In school I enjoyed studying English literature, history and science with the same passion. Being a science teacher my father had innovative ways of making me understand the beauty of science. I always had the freedom to express my ideas and make my choices. So I decided that I would get into a medical school. But that was not to happen and I graduated in Microbiology. I then realized that there is a world beyond medical school. We were the first batch of K.J.Somaiya College to graduate in Microbiology. The non-fiction book popular among students in those days was 'Microbe Hunters'. It had stories that described important events in history of microbiology and contributions made by the great masters. The

book fascinated me and strengthened my decision to pursue a career in science.

I applied for the postgraduate program at the Cancer Research Institute (CRI) in Mumbai. The selection process was stringent and I faced stiff competition but I was selected for the masters program. It was my first step into, research. I decided to continue for a Ph.D. degree at the Cancer Research Institute working under the guidance of (Late) Dr Mrs Kumud Karande.

I got married to Vivek at that time. I was determined to pursue an academic career, and this decision received unanimous support from all at home. Education was a top priority with the Chiplunkars so I received support from Vivek, himself a mechanical engineer. A post doctoral offer in 1984 meant I would be away from home for a few years. I resigned from the job of 'Scientific Officer' at CRI and joined the lab of Prof. Stefan Kaufmann at the Max Planck Institute for Immunobiology in Freiburg, Germany.

The postdoctoral training was a turning point. Stefan was an exuberant, dynamic and demanding supervisor. I was working with him on understanding the role of cytotoxic T cells in leprosy. In 1984, T cell cloning was a hot field. With all zeal and determination I stepped into this field not realizing the frustration and disappointments I would be facing! Making T cell clones to *M.leprae* was not an easy task for a postdoc working within a limited time frame. Simultaneously, I decided to pursue another project, on understanding the role of recombinant interleukin 1 as a B cell growth and differentiation factor. The time spent at MPI was enriching. After a year we finally got interesting results. It changed my outlook to research and I developed a strong fascination for immunology. Staying away from my family for all these years was not easy, and in 1986, I returned home with a firm decision to work in immunology. At that time CRI was engaged in anti-leprosy vaccine trials and were looking for immunologists with experience in the field. My training in mycobacterial immunology turned out to be an asset and I joined the institute as Scientific Officer in the Immunology department and had the opportunity to work with distinguished scientists Dr S. G. Gangal and Dr M. G. Deo. Working on the leprosy vaccine project proved to be a

multifaceted experience. In addition to doing basic research, this involved visits to leprosy hospitals, vaccine trial areas and helping in project administration. I was exposed to a new area of public health management. I developed my own group and decided to work on understanding the role of a unique subset of lymphocytes, gamma delta T cells in tumor immunity. It was a challenge to handle projects on leprosy and cancer, and I was lucky to have very good students and staff members forming a wonderful team! Around that time I became a part of the 'Molecular Immunology Forum'. It was a group of 'young rebels' who were keen to discuss good science outside the 'traditional disciplines'. Being a member of this group has been the most educating experience of my life. In due course, I expanded my research interests to other areas of innate immunity, understanding reasons for immune dysfunction in patients with cancer and development of immunotherapeutics (monoclonal antibodies). It was through the interaction I had with clinicians at Tata Memorial Hospital that I realized the need to have a translational component in my area of work and we initiated projects that addressed some of these issues.

Looking back upon the 25 years I spent in research as a woman scientist, although I did not face major road blocks that could steer me away from the path, I did encounter obstacles which have made me emerge as a stronger person. Gender bias did not become a hindrance, although I feel it remains a major issue which women scientists face even today. I strongly believe in my abilities and capacity to undertake challenging projects and to move ahead!