

Being born in an era where Science flourishes and is relentlessly used as a base to solve all of mankind's problems makes me yearn for the knowledge it bestows. I first discovered Science at the age of 10, when I read a set of junior encyclopedias, which introduced me to a world full of diversity.

The amazement of having billions of cells that coherently work together to run a machine most efficient created a sense of awe and admiration in me. My interest in science grew further, as I realized that everything I learnt was interlinked. It was amazing to know how hydrogen bonding between base pairings and the bond angles within a DNA strand related back to Chemistry. This interest has fired in me the desire to study Biomedical Sciences.

Through a Biology discussion I learnt that, when we partake in academic work, the neurotransmitter traffic that governs our thoughts, improve and the new connections formed work more efficiently. This led me to further research and come across Dr. V.S. Ramachandran of California University. The simplicity of his findings that challenged the Freudian theory about the Cap grass syndrome stood out for me.

Subsequently, I read 'The Emerging Mind' by the same author and got an insight into how the brain goes through a phase called the 'learned paralysis' after a paralyzed arm is amputated. This phantom arm that occurs after the amputation can cause great discomfort for the patient because of the paralysis. I liked the approach Dr. Rama used to solve this problem. The simple use of a mirror can create superimposed image of the patient's intact hand. The movement of this hand can give the brain visual feedback that phantom arm is moving, and the pain is relieved.

My curiosity to learn more about stem cells motivated me to undertake an Extended Project, whereby I looked at the effects of stem cell research on stroke victims. The advancement that has led the techniques used to recover a patient from stroke has reassured me that terminal illnesses, such as cancer and AIDS will be curable soon. I was also made aware of the complexity of stem cells and the ability they must track damaged tissue and encourage cell growth.

This knowledge and understanding gives me the drive to pursue my studies in biology and chemistry because it gives me the fundamentals to understand more complex ideas. This project helped me gain investigative and research skills required to understand scientific theories at a more profound level and the confidence to make a presentation.

During the summer of 2014, I could do two weeks voluntary work at a (named) Hospital in China. I had the opportunity to observe and interact with Interns, as well as Consultants in the A&E Department wherein serious casualty cases are treated. I had first hand opportunity in testing patients for HIV, Malaria and Blood Glucose levels, besides observing the techniques of suturing and intubation.

This was one of the most enriching experiences of my life, especially to see how Doctors work tirelessly to reach out to large number of patients. Primarily this experience taught me how important it is to remain calm in stressful situations; about team communication and quick decisions.

My other interests include sports, music and cinema. I was privileged in being chosen to captain the School volleyball team and represent my school for nationwide competitions. I sincerely hope XXX University will grant me this opportunity to further my knowledge and interest in medical field.

