My potential to study biochemistry at a university level

Education, University

After reading ‘ oxygen’, which was a fascinating story exploring how oxygen shaped our existence and our world, I became deeply interested in our cellular evolution. The author, Nick Lane, challenged me to think beyond the surface of our existence, and want to discover more about our innermost workings. It is amazing how our bodies work like machines, with our whole anatomy coded out. After following many of professor Robert Winston’s shows, I am lucky to be attending a seminar with him and other Professors to explore the vast world of genetics and expand my biological knowledge.

Through studying Chemistry and Biology, the bridge between the two subjects has become stronger and less blurry. In organic chemistry, we have studied how bonding and molecular structures of molecules can have a vast impact of on the function of cells. During my biochemistry course with the University of East Anglia, we explored how conditions in the surroundings can alter the way in which metabolic processes occur. The course also explored bioenergetics where I was able to expand on my knowledge of Gibbs Free Energy and have discussions with other students to discuss key topics. While volunteering with a pilgrimage to Lourdes, I had first-hand experience assisting the elderly and sick on the hospital wards which gave me insight into science being used in the real world. In the last few decades, many of the Nobel peace prize members have been biochemists, with new drugs and genetically modified crops making a positive worldwide impact. I am interested in studying genetics at a degree level to explore how we are working towards meeting the needs of humans by manipulating the DNA of plants, bacteria and other species to deal with widespread issues like starvation and disease that are preventing further economic development in

third world countries. I am also enjoying Law as a subject as it requires me to apply difficult concepts to situations and requires critical analysis, which is transferrable to drawing accurate, concise conclusions from sets of data. In recent years I have been developing my work ethic to make me a more focused individual; I have successful time management by splitting my energy between working part time at a restaurant and fulfilling my role as a senior prefect by mentoring younger students on how to organize themselves to become effective and efficient learners. This had helped me to become not only more efficient with my time but has taught me to adapt to situations demanding environments.

Over my high school career, I have performed at county level in the 800m track event and represented the girl’s netball team for 5 years, as well as coaching, showing a great team ethic, a skill which is essential for lab work. My interests do not end at biochemistry, I am learning to fly light aircraft, which has taught me analytical thinking, quick thinking and the ability to work very well in a pair, all of which are essential qualities that come with working in a lab. I was also a long-time member of the air cadets where I took to flight engineering and field work, displaying large amounts of self-motivation and wanting to push myself to the height of my ability. Cadets as a whole made me a confident, driven person, as shown through my completion of the Silver Duke of Edinburgh Award. These are all skills that I hope to evolve further within a university community.