

In order to be a vet, you must first and foremost be a fantastic scientist. However, it is also a profession where empathy and understanding must prevail to ensure animal welfare is the top priority. From learning this during work experience, I know I want to pursue a career in Veterinary Medicine, in order to have the privilege to make even the slightest difference in an animal's, and ultimately their owner's, lives.

One of the key drivers of my interest in veterinary medicine, stems from the week I spent at a mixed animal practice, where I saw the vet visit a horse he suspected had Strangles. From this, I learnt of the difficulty of diagnosis, due to Strangles' similarity to *Streptococcus zooepidemicus*. As Strangles is believed to have evolved from an ancestral strain of Strep Zoo, I discovered commensalism, and why Strangles is detected using Polymerase Chain Reaction techniques. Thus, vets must have a broad knowledge of all science, another factor increasing my desire to work in the field. Foot and Mouth disease further interested me, due to the role vets play in disease monitoring, including indirect involvement in human health. I was fascinated by the impact a single virus had on the farming industry and food chain during the outbreak in 2001, encouraging me to research the importance of One Health.

One Health is significant in the spread of rabies, which first interested me following my encounter with a rabid squirrel during work experience in Canada. Consequently, my EPQ focuses on the likelihood of eradication of terrestrial rabies in two countries of differing economic status. From further research, I found that the pathogenesis of the virus occurs in the central nervous system, rapidly replicating virions in the salivary glands. Since this is an example of adaptive evolution, zoonotic diseases particularly interest me as they influence One Health, meaning that, in many cases, the vet's resulting treatment affects humans too. Because a vet's actions can thus have a much wider impact, their role in epidemiology continues to intrigue me, and offers a potential pathway into research that I would be keen to follow.

Another major part of my drive to become a vet, is the impact you have on people's lives, as well as the animal's. As animal welfare is usually the top priority of both the vet and the owner, good communication and people skills are vital in the role, in order to achieve the best care possible. I first noted this after work experience at a canine hydrotherapy centre, where pet owners discussed care they received from the vet. Having also witnessed this through almost ten weeks of placements, I came to realise this was an essential part of the job. The communication skills I have developed from being a lifeguard, and the consequential development of being able to deal with sensitive situations, all played a part in why my goal to be a vet strengthened.

Furthermore, my interests outside of school also contribute heavily to why I want to be a vet. My passion for writing has developed my oral and written communication, as well as improving my ability to critically analyse and evaluate sources. Being able to analyse data and information is imperative in a vet's job, as I have noted that they regularly compare quantitative and qualitative sources, such as x-rays or textbooks, in order to reach valid conclusions. My commitment to my school's Learning Council for more than five years has also developed this skill, as I have had to analyse the way in which my fellow classmates learn and draw ideas from the data to make improvements.

Pursuing a career in the veterinary profession would be the culmination of several years of interest, and a path for which my fascination is unquestionable. Undertaking outside courses such as VetCam, and an online program which introduced me to basic animal handling and disease, has further reinforced my commitment to a veterinary degree, and amplified my passion for science.