

My fascination with biological studies

[Science](#), [Biology](#)



Ever since I started school, the sciences, especially Biology, have intrigued and excited me. I am eternally curious. A combination of watching David Attenborough nature documentaries along with my own close encounters with grass snakes, kestrels and roe deer have nurtured a deep love of nature, an appreciation for its beauty and a keen interest in its innermost workings. As I have grown, this curiosity has manifested itself in a hunger for further learning. To that end I've become a member of the Royal Society of Biology as well as subscribing to Nature Briefing, the online arm of the journal Nature. I am especially interested in genetics and so recently I read "A Crack in Creation" by Jennifer Doudna and Samuel Sternberg. Their careful and in-depth explanation of CRISPR in particular the Cas9 protein with its ability to make precise cuts to DNA was fascinating. I was buoyed by the author's cautious optimism about the future of the technology, I hope we can use it to create a future where debilitating genetic conditions like hyperargininemia and WHIM syndrome are a thing of the past.

Recently Janine Benyus's "Biomimicry" has captivated me. Benyus speaks of new approaches to core aspects of modern life, like farming based on natural succession and the interplay of prairie ecosystems. Hopefully this will solve many of the problems with modern agriculture such as overuse of pesticides, an issue that I'm passionate about due to the damage it causes to species like bees. Attending several Bioscience lectures has kept me informed about the cutting edge of developments in a range of fields. The most interesting talk was on the digital mapping of cancer types and the people affected, as this research is starting to give us a better idea about new oncological possibilities. Hopefully allowing us to increase survival rates from this

dreadful disease. This is why I love Biology, these and a myriad of other ingenious and brilliant advances are helping to not only revolutionise the way we do things, but the way we think about our world and our place in it; Biology is at the heart of that, leading the charge towards a better future.

My experience of field and experimental work in class has given me a solid grounding in a plethora of practical techniques, from precise slide preparation and aseptic techniques to planning and carrying out investigations independently. Experience has also taught me to be more careful, patient and precise in all aspects of my work, both practical and written. The Royal Society's Biology Challenge faced me with questions that require application over simple regurgitation of knowledge, I'm excited to encounter many more questions like this at university. At A Level, Biology has taught me how rigorously experiments need to be planned and executed as well as the importance of concision and accuracy in written work. Lessons have constantly revealed new facets of the subject for me to investigate. During a field trip to Orierton field centre, group work was essential to complete the many different data collection tasks in time and I particularly enjoy contributing and delegating tasks to achieve this.

My study of Biology has been complemented by Chemistry; providing a more complex picture of molecular processes and a much richer appreciation of biochemistry. This, in addition to Maths up to AS Level, has provided a strong foundation which has helped me with numerically based Biology questions, especially statistical tests like Spearman's rank. Politics has taught me many useful analytical techniques that are applicable to political journals and

research data alike, as well as an understanding of essay techniques and structure. Squash is a large part of my life, as a keen player I've played in some tournaments here in the West Country. I'm also participating in the Gold Duke of Edinburgh Award; volunteering for this has improved my confidence as well as taught me how to integrate and work as part of a team.