

A chapter was being taught in school related to drugs and their effect on the body, I could not help but wonder how different drugs have different structures and properties that lead to changes in our body functions. I therefore thought of pursuing a specific programme to acquire knowledge about functioning and impact of chemicals administered in our body as medicines. Thus, I chose to pursue my Bachelor's in Pharmaceutical Sciences.

During my bachelor's degree in pharmacy, I was captivated by subjects like biochemistry, pharmacology, and molecular biology. The intricate details of drug interactions at the molecular level fascinated me. I was particularly intrigued by how cellular mechanisms and molecular structures influence drug efficacy and safety. This curiosity led me to explore molecular biology more deeply, fueling my passion for understanding the complexities of biological systems. My coursework and hands-on laboratory experiences solidified my interest, as I saw firsthand how molecular biology principles are applied in drug development and disease treatment. This foundation has driven my desire to further delve into the field of molecular biology.

I did not confine myself to just academics in my college days as I was one of the most active volunteers of National Service Scheme in my college term of four years. I dedicated most of my college life to NSS and took part in many activities such as Village Camps, Blood Donation Camps, Cleanliness Drives, Environmental Awareness Campaigns and Street Plays which created awareness about various social issues such as Voting rights, Cleanliness, Women Empowerment, Climate Change and many more. Also, I lead the management team in the ninth University Youth Festival and successfully executed every activity in the event.

In the Eighth semester of my undergraduate studies, I completed a group project **on Spike Glycoprotein and Introduction to Protein Databases**. The intricate details of how spike proteins interact with host cells and the vast world of protein databases unveiled a whole new dimension of scientific exploration. I was fascinated by the precision and complexity of protein structures and their role in cellular functions. This project not only expanded my understanding of molecular mechanisms but also fueled my enthusiasm for studying the minute yet crucial components of biological systems. The experience solidified my passion for molecular biology, driving me to delve further into this captivating field.

Post my undergraduate studies, I started working as a Pharmacist at a prestigious **Dr. Baldev Memorial Hospital**. Daily, I encountered complex interactions between drugs and the human body, which piqued my curiosity about the underlying mechanisms at the molecular level. The need to understand why certain medications worked effectively or caused adverse reactions led me to delve deeper into the molecular processes involved. As I began to explore these processes, I was fascinated by the intricate world of proteins, enzymes, and genetic information. This growing intrigue motivated me to pursue molecular biology, where I could combine my practical experience with a deeper understanding of the molecular foundations of health and disease.

Afterwards, I got a golden opportunity to work at a biotechnology company known as **Akem Biotech Pvt. Ltd.**, The hands-on experience with cutting-edge technologies and techniques, such as gene sequencing and protein analysis, ignited my fascination with the intricate mechanisms of life at the molecular level. I found myself captivated by the way molecular interactions drive biological processes and influence health. The complexity and potential for innovation in molecular biology inspired me, solidifying my interest in understanding and manipulating biological systems for better health outcomes. This experience has profoundly shaped my career aspirations.

My decision for pursuing a master's degree was rooted to the curiosity and zeal within me to upskill my knowledge and gain a tremendous amount of exposure within the field. Moreover, higher education based on specific domain knowledge will help me to connect with peers, professors, and industry professionals,

expanding my professional network in the particular field. Out of every other destination for study abroad, I decided upon Austrian education because, for starters, the quality of education in the country is top-tier and focuses on both industry and research-based knowledge, which is a perfect blend. On top of that, the affordable tuition fees in the universities makes higher education in Austria financially accessible for me. These things, adding up to the multicultural and diverse environment makes this country to be paramount for pursuing a degree.

I chose **University of Vienna** because of several reasons. The primary reason is I found the modules of this program intriguing and aligning with my interests and skillset with courses such as Structure and function of cellular components, Signal transduction, Control of gene expression, RNA- and chromosome biology, Stems Cells and Developmental Biology and many more scientific modules for molecular biologists. The university is ranked at **137 in QS Rankings** which provides surity for a quality education and increases credibility in the job market. Moreover, I have been intrigued by the publications by university faculty such as PI(3,4,5)P₃ Engagement Restricts Akt Activity to Cellular Membranes by **Dr. Ivan Yudushkin**. Articles like these helped me in a better understanding of Molecular Biology.

A master's in molecular biology from University of Vienna open doors to a variety of exciting career profiles. I'm particularly interested in roles such as molecular biologist, research scientist, or genetic counselor. This advanced degree will also equip me for positions in biotechnology companies, where I can work on developing new therapies or improving existing ones. Additionally, I can pursue careers in academia or governmental research institutions, contributing to groundbreaking studies in genetics and cell biology. The skills and knowledge I gain will allow me to explore innovative research opportunities, collaborate with interdisciplinary teams, and potentially shape the future of molecular medicine and biotechnology.