

## **STATEMENT OF PURPOSE**

I am **Jwalitha Nalla** and have always dreamed of a career in decoding the intricate molecular mechanisms that control life. Therefore, I hereby apply for the **M. Sc. Quantitative Molecular Biology program at the excellent Humboldt University of Berlin**. My academic journey has been in the continuous discovery of knowledge about biotechnology, molecular biology, and quantitative analysis among other biological complexities generated by my irresistible curiosity.

I am currently pursuing my **Bachelor's Degree in Biotechnology** from the reputed **Gandhi Institute of Technology and Management (GITAM) University of India**, where I obtained a thorough knowledge of topics like Cell Biology, Enzymology, Immunology, and Stem Cell Biology. This experience, has demonstrated my perseverance and the capacity to achieve more in academically demanding places. Moreover, my IELTS overall score is of 7 bands.

Beyond the classroom, I have been actively participating in extracurricular activities that have enriched my experience and helped me sharpen my abilities. Specifically, I volunteered at the **International Conference on "Green Chemistry Solutions for Sustainable Future,"** from which I collected knowledge and ways to implement sustainable initiatives in biotechnology. I also got to conduct **research projects at NIPER Hyderabad and Teachnook**, which added to my knowledge of the subject.

The M. Sc. Quantitative Molecular Biology program at Humboldt University of Berlin, something that I will be happy to be a part of, serves as a unique point where my academic ambitions intersect. Through its modernized curriculum and quantitative analysis course, the program will give me a unique chance of becoming part of the computational biology and bioinformatics field while data-driven technologies transform this area from the molecular processes down to their tiniest details.

This program will allow me to master techniques and develop skills that are imperative for an advanced data analysis, such as **genomics, transcriptomics, proteomics, and metabolomics, to be used during the analysis of complex biological experiments**. The program's integrative perspective will expose me to the concepts of systems Level Thinking, enabling me to overcome the barriers between theoretical knowledge and practical applications and providing a well-rounded picture of how the biological world functions.

Also, I will have the privilege of getting to know renowned academicians and researchers from Humboldt Berlin University and thereby learn about recent achievements and innovative techniques that are being used across the globe. This profound learning setting will give not only opportunities for me to broaden my knowledge, but also will provide me with the ability to think critically and solve problems, making me able to cope with the most profound challenges in molecular biology.

On the basis of **Germany** being considered a world leader in scientific research and innovation as well as the country's orientation on the standards of top class higher education, it goes without saying that studying molecular biology in Germany is a perfect choice. Humboldt University of Berlin, especially, is situated as a symbol of academic supremacy as it enjoys the visit of the best brains from different quarters in the world and as a result, the spirit of intellectual inquisitiveness and collaboration persevere.

I was deeply fascinated by the university's innovative setting, the top-notch learning environments and cutting-edge research laboratories which are equipped with advanced computational resources, making it an ideal place to widen my scope in the field of quantitative molecular biology. In addition to that, the wider and more inclusive community of the university will open up my vision to a variety of experiences and perspectives, and thus, widen my horizons and give me the opportunity for the job of a lifetime in the scientific workforce.

**Future Goals and Career Aspirations:** Consequently, right after college, I am going to work with global enterprises such as **Genentech, Amgen, or Regeneron** that are in biotechnology or biomedical research. The major actors are at the forefront in the discovery of novel therapies and the enhancement of molecular biology skills supported by computational necessities.

With the combination of my molecular biology research skills and the business-driven mindsets, in the long term, I hope to create a biotech company that develops state-of-the-art diagnostic tools and targeted healthcare products in order to revolutionize the global healthcare industry and finally lead to a better patient outcome everywhere.

In conclusion, the achievements and the hands-on experience, justify the fact that I am a perfect candidate for the Masters of Science. Through this experience, I would attain the wisdom and expertise necessary in immunology not only for my own growth but also to contribute in achieving the progress of science and safeguarding the health of the human race. I am definitely ready to take those challenges on and to enjoy and learn from them as well as to be a part of a prestigious academic community which is the one offered by the Humboldt University of Berlin.

**Thank you for considering my application.**