

Curriculum Vitae

I am a dedicated and accomplished geneticist with a strong academic foundation and extensive professional expertise in molecular biology, genomics, and cancer research. I hold an MSci in Genetics from the University of Sussex, where I graduated with distinction, having completed a Master's thesis on the "*Identification of Novel Partners of Human PrimPol (Primase-Polymerase) in Human Cells.*" My Bachelor's research explored the role of the Tof1 protein in genome stability, equipping me with foundational insights into DNA replication and repair mechanisms.

Professionally, I have contributed to research and development in molecular diagnostics, focusing on assay development, biomarker discovery, and genomic technologies. Most recently, I worked as an Immunophenotyping Technician specializing in multiple myeloma research, developing stem cell-based methods and participating in clinical trials for CarT therapy. Currently, I am pursuing a PhD in Medicine and Experimental Therapies at University Of Perugia, focusing on advancing therapeutic and diagnostic approaches through genetic engineering. My expertise spans advanced laboratory techniques, computational biology, and clinical research, demonstrating my ability to bridge academic research with real-world applications.

Laboratory Experience

I possess extensive laboratory expertise, having developed and refined a range of molecular biology and genomic techniques throughout my academic and professional career. My technical proficiencies include DNA and RNA extraction, PCR (original, real-time, and quantitative), cloning, next-generation sequencing (NGS) library preparation, and CRISPR-based gene editing. I have worked with various cell culture systems, including human pluripotent stem cells and multiple myeloma-derived samples, excelling in cell passaging and tissue culture. My immunophenotyping work has equipped me with advanced flow cytometry skills, including multi-color staining protocols for clinical analysis. Additionally, I am adept at bioinformatics, with experience in data analysis using Python, and various genomic databases such as GenBank and Ensembl. My hands-on experience in assay optimization, biomarker identification, and troubleshooting has honed my ability to design, execute, and interpret experiments with precision, making me well-equipped to contribute to cutting-edge research and innovation.