

Curriculum Vitae

Bachelor's degree in biotechnology at University of Camerino (2021) and master's degree in molecular and medical biotechnology at University of Verona (2023), both achieved with 110/110 with honors. During my master's degree I also worked as university tutor for students attending the "Dual Career" program. I have a certified C1 level of English language, according to Certificate of Advanced English(CAE) released by Cambridge University Press & Assessment.

In November 2023, I passed the Biology National Exam and obtained the qualification of Senior Biologist. In September 2023, I started the post-graduate Master course in Healthcare and Life Science "Scienziati in Azienda" at ISTUD Business School, which I completed in July 2024.

From January to October 2024, I worked as a Medical Affairs Intern in the Immunology area of Sanofi s.r.l., focusing on two therapeutic areas in the fields of Gastroenterology and Rhinology: Eosinophilic Esophagitis (EoE) and Chronic Rhinosinusitis with Nasal Polyps (CRSwNP).

In November 2024, I started a PhD course in Medicine and Experimental Therapies at University of Perugia, which I am currently attending. I am in the PhD program "Integrated biological strategies in genetic, immuno-metabolic and oncological pathologies", with a grant entitled "RWE, Big data, artificial intelligence and digital health in chronic inflammatory diseases and oncology: state of the art and new perspectives".

Laboratory expertise

During my bachelor's degree I carried out my internship at Synbiotec s.r.l., a biotechnological company operating in the probiotics field. There, I followed a project for assessing the potential of some specific probiotic strains for preventing and/or treating acne, on which I carried out my final thesis entitled "In vitro adhesion and competition tests on new candidate probiotic strains for treatment and prevention of acne". This was my first experience in a Microbiology research lab, in which I could learn some basic laboratory techniques, data analysis, and also assist in the production area. This experience instilled in me a deep interest to delve deeper into the Microbiology field, which is why, during the master's degree, I decided to carry out my experimental thesis in the Department of Diagnostics and Public Health, Microbiology Section at University of Verona. In this context, I carried out a research project on the application of a new technique called Fourier Transform Infrared Spectroscopy (FTIR-S) for the typing of *Pseudomonas aeruginosa* bacterial strains isolated from

patients suffering from Cystic Fibrosis. My final thesis was entitled “Fourier transform infrared (FT-IR) analysis of *Pseudomonas aeruginosa* strains isolated from cystic fibrosis patients”. During this period, I learnt and performed autonomously several laboratory techniques concerning the Molecular Biology and Microbiology sectors, as well as data analysis. In particular, I gained experience in culture media preparation, DNA extraction, PCR, Electrophoresis, MALDI-TOF MS, Pulsed-Field Gel Electrophoresis (PFGE), FTIR-S, Multi-Locus Sequence Typing (MLST), Multi-Locus Variable Analysis (MLVA), broth microdilution test for MIC determination and Kirby-Bauer test.