

Curriculum Vitae

Bachelor's degree in Biotechnology from the University of Perugia (2023) and Master's degree in Molecular and Industrial Biotechnology from the University of Perugia (2025). During my master's degree, I also worked as a university tutor for students with learning disabilities (DSA).

Laboratory expertise

During my bachelor's thesis, I completed an internship at the Biochemistry and Molecular Biology laboratory, carrying out an experimental thesis project focused on evaluating the different impacts of electronic cigarette smoke and traditional cigarette smoke on the BEAS-2B cell line. During my master's thesis, I completed an internship at the Microbiology laboratory, conducting an experimental thesis project based on identifying predictive methods for bacterial biofilm and on the relationship between bacterial biofilm and plastic biodegradation.

Laboratory Techniques

- Extraction of DNA, RNA, Proteins
- PCR, gel electrophoresis (agarose, SDS-PAGE)
- Spectrophotometry (UV-Vis)
- Western, Southern, Northern blot
- Bacterial transformation, transfection
- Cell cultures (eukaryotic and prokaryotic)
- Enzyme assays, protein purification, pH measurement
- NTA (Nanoparticle Tracking Analysis)
- Extracellular vesicle isolation and characterization
- ROS analysis
- MTT assay
- Bacterial growth curves
- FTIR
- Crystal violet assay
- PCL degradation by bacteria

Equipment

- Manual and multichannel pipetting
- Centrifuges, incubators, thermostatic shakers
- Laminar flow hoods
- Optical and fluorescence microscopes

Software

- GraphPad Prism
- Excel
- PowerPoint
- R (basic)
- MEGA
- SnapGene
- BLAST