

CV

I'm Melania Ligato currently a PhD Student in the Lab of Prof. Roberta Spaccapelo. I achieved my Bachelor's Degree in Biotechnology in 2020, with a subsequent Master's Degree in Medical Biotechnology in 2022. After my graduation I obtained a research scholarship and after that I started my PhD programme in 2023 in "Inflammatory and infectious diseases, therapeutic strategies and bio-law".

EXPERTISE IN LAB

During my studies I had the opportunity to attend laboratory sessions in histology, immunology, molecular biology, pathological anatomy and microbiology. In particular during the internship of my bachelor degree, I dealt with preparation of cytological and histological samples by fixation, dehydration, paraffin embedding and staining. Instead, during the internship of Master's Degree, I applied molecular biology techniques, such as DNA/RNA extraction, PCR, Gel Electrophoresis, Real Time PCR, Cloning, Western Blot, and Mini/Maxiprep. After my graduation I obtained a research scholarship that allowed me to acquire skills in the field of mosquito breeding techniques in insectarium and dissection as well as deepened my knowledge in molecular biology. During my doctorate I will be working on the generation of transgenic mosquito lines with the CRISPR-Cas9 system. The resulting transgenic mosquito lines will be used to investigate the correlation between their swarming behavior and auditory system through various technologies such as the 3D-tracking system, artificial intelligence and bioinformatic analysis.