EDUCATION

University of Rome "La Sapienza", Rome, ItalyPhD student in Data ScienceOct. 2021 – PresentWinner of a three years PhD fellowship financed by the National Cancer Institute "Regina Elena".Project aim: Developing a computational method to dissect accessibility profiles from longitudinal datasets.Oct. 2021 – Present

University of Rome Tor Vergata, Rome, Italy MSc Bioinformatics (Summa cum Laude) 2019 – 2021 Degree Thesis: Worked on Epigenetics of pediatric type-B ALL, investigated the differences in chromatin accessibility in type-B ALL cancer evolution, crossed the data from multiple nex-generation sequencing data.

University of Rome Tor Vergata, Rome, ItalyBSc Biotechnology (Summa cum Laude)2016 – 2019Degree Thesis Researched interaction between cellular alteration and IC50 from different chemotherapy in cellular line
based on Francesco Iorio publication "A Landscape of Pharmacogenomic Interactions in Cancer"2016 – 2019

PROFESSIONAL EXPERIENCE

PhD visiting Medical University of Vienna, Vienna, Austria Feb 2023 – Aug 2023 Visiting PhD student at the Barozzi's Lab Developed a co-accessibility network to investigate the alteration in chromatin accessibility during cancer evolution in bulk and single cell sequencing Performed single cell multiomics analysis National Cancer Institute "Regina Elena", Rome, Italy **Off-Cycle trainee** Sep 2020 – June 2021 Leading Cancer research institute and Bioinformatics facility in Lazio Developed and tested bash pipeline to standardize new approach in ATACseq analysis and peaks classification Analysed ATACseq data from patients and from cellular line, performed differential analysis on those data Performed RNAseq, ChIPseq and HiC data analysis Integration of data from multiple databases such as ENCODE, TCeA and TCGA University of Rome Tor Vergata, Rome, Italy **Trainee Students** March 2019 - May 2019 Bioinformatics University Group working on Pharmacogenomic data and Artificial Intelligence applied at biology Explored TCGA dataset of different cancer type and relative IC50 • Acquired basic Python skills principal on Pandas and Numpy library • Studied and applied basic machine learning algorithms such as Random Forest and SVM University of Rome Tor Vergata, Rome, Italy Intern Student Sep 2017 Genetics University Group working on identification novel target in muscular dystrophy Studied principal Molecular Biology technique in wet lab, principally Western Blot and Cell-culture SUMMER SCHOOL AND CONFERENCIES Francesca Martini Award for an experimental thesis in Oncohaematolholog, NAnA Onlus 2022 Winner of the best master thesis in oncohaemathology CGSI 2022 Summer School 6-29 July 2022 Selected for the long program summer school at the University of California Los Angeles. EMBO Conference "The many faces of cancer evolution" 20-22 May 2022 Selected for a poster presentation at the EMBO workshop in-person at Rimini. EMBL in Italy 2021: A Brave New World of RNA 20-21 May 2021 Selected for a poster presentation at the European Molecular Biology Laboratory virtual conference. **ISMB/ECCB 2021 Virtual Conference** July 25-30, 2021

Selected for a poster presentation at the international society for computational biology virtual conference.

ADDITIONAL INFORMATION

IT Skills: Machine Learning Algorithms, Programming Languages (bash, R, Python), Bioinformatics Tool (Macs2, Bowtie2, samtools, bedtools, deeptools, fasqc), Bioinformatics Analysis (RNAseq, ATACseq, ChIPseq, HiC), Linux-like systems, Graphic tools (Photoshop, Illustrator, Premier), Manage Conda environment, LaTeX **Languages:** English (Intermediate), Italian (native)