

## CURRICULUM VITAE

### Personal data

Name and surname: Edoardo Rapisarda

Date and place of birth: August 5th 2000, Catania (CT)

Citizenship: Italian

E-mail: [edoardo.rapisarda01@universitadipavia.it](mailto:edoardo.rapisarda01@universitadipavia.it)

### Education

**October 2023–ongoing.** Master in Molecular Biology and Genetics (120 CFU), University of Pavia.

**April 27th 2023.** Bachelor Degree (110/110 cum laude) in Biological Sciences, University of Catania. Thesis: "Respirometric characterization of the VDAC1 knockout HAP1 cell line". Supervisor: Prof. Andrea Magri.

**July 2019.** High school diploma (94/100), Liceo Statale Scientifico "Archimede", Acireale (CT).

### Research experience

**October 2023 – ongoing:** Currently undertaking research training for my Master's degree in the Laboratory of Molecular and Cellular Biology, University of Pavia. During my internship, I am studying mammalian centromere biology and evolution from both molecular and cytogenetic perspectives.

**January 2023- April 2023:** Research training for the Bachelor Degree in a laboratory focused on mitochondrial bioenergetics, within the Department of Biomedical Sciences and Biotechnology, University of Catania.

### Technical skills and competences

Experience with molecular cellular biology and cytogenetic techniques, including bacterial culture, transformation, extraction and purification of genomic and plasmid DNA, restriction enzyme analysis, PCR, and DNA cloning methods.

Familiarity with bioinformatics tools for the analysis of DNA, RNA, and protein sequences such as NCBI BLAST, UCSC BLAT, Multalin, RepeatMasker, and UniProt. Experience with major biological databases including NCBI Nucleotide, NCBI Gene, NCBI Protein, UCSC Genome Browser, and Ensembl Genome Browser.

Conducted bioinformatic analysis of sequencing data using tools such as Chromeister, Bowtie2, Samtools, Bedtools, deepTools, IGV, and pyGenomeTracks, working in Linux command-line environments as well as the Galaxy online platform.

Experience with programming languages including shell/bash scripting and R for data analysis.

Basic understanding of Nextflow.

**Language skills:** Italian (mother tongue). English (C1 level, Cambridge certification, 2023)

### Meeting abstracts

Marialaura Biundo, Maria Francesca Piras, Riccardo Fabio Basta, Yary Ferretti, **Edoardo Rapisarda**, Solomon Nergadze, Elena Giulotto and Eleonora Cappelletti. Robertsonian translocation was the major cause of neocentromere formation during the evolution of Hartmann's zebra. Associazione Genetica Italiana (AGI) Congress, September 17-19 2025. Bari, Italy.

**Project title:** The role of centromeres in the evolution of genomes and in cancer cells

**Supervisors:** Prof.ssa Elena Giulotto and Solomon Nergadze

**Reviewer:** Elena Raimondi