

PAOLA CANALE

PhD student in Genetics, Molecular and Cellular Biology at University of Pavia

Research Topic: Dissecting the molecular underpinnings of clinically relevant NET cell states to improve patient outcomes

Supervisor: Natalia S. Pellegata

EDUCATION

University of Pavia (PV)

Master's degree in Experimental and Applied Biology, curriculum Molecular Biomedicine, 2023-2025.
Grade 110/110 cum laude.

Master's thesis title "Study of C-circles as a biomarker of ALT-positive pancreatic neuroendocrine tumors".

University La Sapienza (RM)

Bachelor's degree in Biological Sciences, Class L-13, 2020-2023.

Grade 100/110

Bachelor's thesis title "Mechanisms of senescence in hematopoietic stem cells".

RESEARCH EXPERIENCE

Internship at the Human Cancer Genetics Laboratory at the University of Pavia
(September 2024- March 2026)

Internship at the Laboratory of Programmable Materials and Structures (ProMast Lab)
(October 2025-December 2025)

TECHNICAL SKILLS AND COMPETENCES

Molecular biology techniques:

- PCR (end-point, Real-Time PCR, RT-PCR), Rolling Circle Amplification;
- Agarose gel electrophoresis;
- DNA/RNA extraction from cell pellets, supernatant, plasma and tissues;
- Protein extraction and quantification via BCA; Western Blot; Immunofluorescence.

Cell Biology:

- Maintenance of mammalian cell lines and primary cultures (2D and 3D; adherent and suspension), co-cultures;
- Microscopy (brightfield and fluorescence)
- Drug treatment assays;

- Transfection of microRNA;

Data Analysis:

- Basic knowledge of bioinformatics (BASH and R programming)
- Statistical analysis skills (GraphPad Prism, ImageJ).

COURSES

- IZSLER Course: Biology and Management of Laboratory Animals, DM August 5 2021 Rodents and Lagomorphs;
- IZSLER Course: National Legislation and ethics Level 1, DM August 5 2021.
- Participation in the second edition of the Summer School in Flow Cytometry, University of Pavia, 2025.

LANGUAGES

- **Italian:** Native Speaker
- **English:** B2

REFERENCES

- **Natalia Simona Pellegata**, Department of Biology and Biotechnologies, University of Pavia.
- **Lorenzo Bonetti**, Department of Civil Engineering and Architecture, University of Pavia.