

Gaia Veniali

Name: Gaia Veniali
Date and place of birth: 9th March 1999, Genova (GE), Italy
Citizenship: Italian.
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Current position

1/11/2023 – present: PhD student in Genetics, Molecular Biology and Cellular Biology, Pavia University and Istituto di Genetica Molecolare IGM-CNR “Luigi Luca Cavalli-Sforza”.

Education

25/7/2023: Master Degree (cum laude) in Molecular Biology and Genetics, Pavia University.
14/6/2022: 24 CFU for teaching, Pavia University.
16/9/2021: Bachelor Degree (cum laude) in Biological Science, Genova University.
29/6/2017: High School Diploma (90/100), Liceo Scientifico Calasanzio, Genova (GE).

Research Experience

02/2021-07/2023: Research training for the Master degree at the IGM-CNR Pavia. Supervisor: Prof. D. Orioli. Research activity: Basis of the different skin cancer risk in human disorders caused by mutations in the same gene, *XPD*.
03/2021-07/2021: Research training for the Bachelor degree at Genova University (Dept. of Experimental Medicine, Biochemical section). Supervisor: Prof. S. Bruzzone. Research activity: therapeutic approaches targeting NAD biosynthesis and NAD-degrading enzymes, such as CD38.

Educational activity

10/2022-12/2022: Tutoring for two histology laboratories in Biotechnology and Biological Science courses (Supervisor: Prof. Riva and Prof. Bottone) at Pavia University.
09/2020-09/2021: Welcoming Tutor (Buddy) for Genova University.

Technical skills and competences

Cellular biology: *in-vitro* propagation of primary human cells, cell transfection, generation of three-dimensional *in vitro* culture models.
Molecular biology: RNA purification, DNA cloning, DNA transfection, quantitative Reverse Transcription (qRT)-PCR; Protein extraction, Protein quantification (Bradford assay and Coomassie blue staining), Western blotting, Protein detection and quantification.
Informatics, Bioinformatics and Statistics: use of Windows, Mac Os X, Linux and Office package; primers and probes designing, use of biological DataBases, use of R package for statistical analysis, data normalization, use of software for qRT-PCR and Western blot quantification, Exploratory data analysis, DGE, Pathway enrichment analysis.
Biochemistry: HPLC analysis, fluorimetric determination of intracellular $[Ca^{2+}]$, nucleotide dosage with sensitive enzymatic cycling assay procedure.
Microbiology: Inoculation, Incubation, Isolation of bacteria, Bacterial transformation.
Histology: Sample Processing (Fixation and preservation, Embedding, Sectioning, Staining), Light and Fluorescent microscopy.
Moreover, general skills acquired during Bachelor studies in different biological field (i.e., developmental biology, botany, organic and inorganic chemistry).

Languages skills

First Certificate in English (B2) 2018.

PhD informations:

Title project: Molecular and Functional alteration in Nucleotide Excision Repair (NER) defective diseases

Supervisor: Dr.ssa Manuela Lanzafame

Reviewer: Prof.ssa Natalia Simona Pellegata