



Emanuele Vitale

Nationality: Italian **Date of birth:** 19 Apr 1999 **Place of birth:** Palermo, Italy

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EDUCATION AND TRAINING

Ph.D. in Technologies and Sciences for Human Health

University of Palermo [1 Nov 2022 – Current]

City: Palermo | **Country:** Italy | **Website:** <https://www.unipa.it/dipartimenti/stebicef/dottorati/tecnologieescienzeperlasalutedelluomo> | **Field(s) of study:** Health and welfare ; Natural sciences, mathematics and statistics: • Biology | **Level in EQF:** EQF level 8 | **Thesis:** Innovative therapeutic approaches for the recovery of gene function in rare genetic diseases characterized by the presence of stop mutations.

-Cellular and Molecular Manipulation:

Experienced in "in vitro" cell culture manipulation, including expansion, maintenance, and transient/stable transfection of mammalian cell lines. Familiar with routine handling of genetically modified "in vivo" model system such as murine models and sample preparation from animal tissues.

-Laboratory Techniques and Analytical Tools

Experienced in the use of advanced molecular biology and analytical techniques, including Western blotting, quantitative PCR (qPCR), and fluorescence-based assays. Skilled in operating laboratory instrumentation for protein, nucleic acid, and cell analysis.

-Genomic and Proteomic Methods

Hands-on experience in nucleic acid and protein isolation, endpoint PCR, DNA genotyping, and gene expression profiling. Adept at performing quantitative and qualitative analyses from both human and animal biological samples.

-Microscopy and Data Analysis

Trained in fluorescence and immunofluorescence microscopy, with experience in cellular imaging, image acquisition, and analysis using tools such as GraphPad Prism, ImageJ and AxioVision for quantitative evaluation of biological processes.

Visiting Researcher Scholar

University of Pennsylvania - UPENN Arts and Sciences - Chemistry Department [10 Jan 2024 – 11 Jul 2024]

City: Philadelphia | **Country:** United States | **Website:** <https://www.upenn.edu/> | **Field(s) of study:** Natural sciences, mathematics and statistics: • Biochemistry • Biology | **Level in EQF:** EQF level 7 | **Thesis:** Study of the Translational Readthrough-Inducing Drugs (TRIDs) mechanism of action.

-Basic experience with key biochemistry techniques applied to protein synthesis and drug screening

-Familiar with high-throughput screening assays used to evaluate translational readthrough-inducing drugs (TRIDs)

-Working knowledge of the PURE-LITE in vitro translation system for studying protein translation mechanisms

-Introductory experience with HPLC analysis for isolating and characterizing, ribosome, elongation and release factors involved in translational processes

State Certification for the Professional Practice of Biology

University of Palermo [14 Nov 2022 – 14 Nov 2022]

City: Palermo | Country: Italy | Website: <https://www.unipa.it/> | Field(s) of study: Natural sciences, mathematics and statistics: • Biology | Final grade: 50/50 | Level in EQF: EQF level 7

Master's Degree in Molecular Biology and Health

University of Palermo [27 Sep 2020 – 13 Oct 2022]

City: Palermo | Country: Italy | Website: <https://www.unipa.it/> | Field(s) of study: Natural sciences, mathematics and statistics: • Biological and related sciences not elsewhere classified • Biology • Biochemistry | Final grade: 110 su 110 cum Laude | Level in EQF: EQF level 7 | Thesis: Restoration of LRBA (R1683X) protein expression in human fibroblasts and generation of a homozygous mouse model carrying the G542X stop mutation in the CFTR Gene

-Molecular Biology
-Biochemical Mechanisms of Cellular Functions
-Molecular Genetics
-Epigenetics
-Molecular Microbiology
-Bioinformatics Methods

Bachelor's Degree in Biological Sciences

University of Palermo [5 Oct 2017 – 13 Oct 2020]

City: Palermo | Country: Italy | Website: <https://www.unipa.it/> | Field(s) of study: Natural sciences, mathematics and statistics: • Biological and related sciences not further defined • Biology | Final grade: 104 | Level in EQF: EQF level 6 | Thesis: Ecotoxicological Impact of Titanium Dioxide (TiO₂) on the Bivalve Mollusk Tegillarca granosa

Scientific High School Diploma

Liceo Scientifico Statale Galileo Galilei [1 Sep 2012 – 12 Jul 2017]

City: Palermo | Country: Italy | Website: <https://www.liceogalileipalermo.edu.it/> | Final grade: 82/100 | Level in EQF: EQF level 4

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

English

LISTENING B2 READING B2 WRITING B2

SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user

SKILLS

Microsoft Office package: Microsoft Word, Excel, PowerPoint / Problem Solving / Critical Thinking / Attention to Detail / Teamwork and Collaboration / Time Management / Adaptability / Communication Skills / Organizational Skills / Ability to Work Under Pressure / Curiosity and Willingness to Learn