

# Federica Gentile

Medical and Pharmaceutical Biotechnology

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## Formation

October 2021 – Today **PhD in Genetics, Molecular and Cellular Biology**, University of Pavia - Department of Biology and Biotechnology "L. Spallanzani".

Supervisor Prof. Natalia Simona Pellegata

Description The research project is based on the application of most recent high-throughput technologies to study genetic, genomic and molecular patterns important for tumor development and progression through an integrated, interdisciplinary approach. Transcriptomic and genomic data derived from the analysis of neuroendocrine and gastrointestinal tumors analyses, will be evaluated by dedicated bioinformatics approaches in order to find novel genetic signatures and predictive markers.

September 2019 – October 2021 **Master Degree in Medical and Pharmaceutical Biotechnology**, University of Pavia.

### Master Degree thesis

Titolo *Tribbles* genes role in gastric cancer: a genomic approach

Supervisor Prof. Guglielmina Nadia Ranzani

Co-supervisor Dott. Rossella Tricarico

Description *Tribbles* genes have been found to contribute to tumor onset and progression. They behave as either oncogenes or tumor suppressors in a tissue-dependent manner. Based on these findings, there is a growing interest in TRIB proteins as potential diagnostic, prognostic and predictive markers regarding the response to pharmaceutical and chemotherapeutic treatments. While *Tribbles* genes have been studied in various human tumors, data on gastric cancer are almost non-existent. The aim of this work was to investigate *Tribbles* genes in gastric cancer through an in silico approach, using several web sources.

September 2016 – October 2019 **Bachelor Degree in Biotechnology**, University of Teramo.

### Bachelor Degree Thesis

Titolo Diet-related risk factors and their incidence on hereditary breast cancer

Supervisor Prof. Alessia Colosimo

Description Diet represents one of the major modulators of hereditary breast cancer onset, knowing the risk factors and their role may help in fighting and preventing the cancer disease.

2016 **High School Diploma**, Liceo Classico "G.B. Vico" - Chieti.

### languages

Italian - Native language

English - Level B2

## Experiences

February 2021– September 2021 **Thesis Internship**, University of Pavia - Department of Biology and Biotechnology "L. Spallanzani", University of Pavia.

Internship at the Tumor Genetics Laboratory - Prof. Guglielmina Nadia Ranzani.

January 2019– **Internship**, *Laboratory assistant*, Medical Research Centers Ce.S.I. and I.T.A.B., Chieti.  
March 2019 Curricular internship at diagnostic laboratory of Medical Genetics - Professor Liborio Stuppia.

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## Technical skills

From Master Degree Internship Bioinformatic database (CCLE, NCBI, cBioPortal, Clustal Omega) ●●●●●  
R programming ●●●●●  
Python programming ●●●●●  
Bash programming ●●●●●  
Cell culture techniques ●●●●●

From workshops Mass Spectrometry (MALDI-TOF) BSA Assay  
Nucleic acids extraction (salting-out and trizol)  
Proteins extraction  
PCR  
Pyrosequencing  
ELISA  
electrophoresis

from Bachelor Degree Internship BRCA1/2 gene sequencing, SHOX mutations, X-Fragile (NGS, Ion Torrent, Sanger)  
RT-PCR