



Curriculum Vitae

Michela Felaco

PERSONAL INFORMATION

Michela Felaco



Sex Female |

| Nationality Italian

EXPERTISE Experimental oncology/pancreatic cancer/cancer genetics

EDUCATION

October 2019 - April 2022

Master's Degree in Cellular and Molecular Biology and Biomedical Sciences – Molecular Cellular Curriculum (LM-6 DM-270)

Università degli Studi di Roma Tor Vergata (RM) – Italy; 110/110 cum Laude

October 2016 – July 2019

Bachelor's Degree in Biotechnology (L-2 DM- 270)

Università degli Studi di Roma Tor Vergata (RM) – Italy; 110/110 cum Laude

September 2011 – July 2016

Science and Math's High School Diploma

Liceo Scientifico "Francesco Severi", Frosinone (FR) – Italy; 100/100 cum Laude

RESEARCH EXPERIENCE

October 2020 – April 2022

Curricular internship for degree thesis' elaboration

Dr. Luca Cardone laboratory, Institute of Biochemistry and Cell Biology, National Research Council (CNR) (Via Ercole Ramarini 32, Monterotondo).

BRIEF DESCRIPTION OF THE RESEARCH ACTIVITY

Project title: Study of molecular mechanisms of KRAS-dependent pancreatic tumors' response to decitabine.

Mutant KRAS is present in approximately 90% of pancreatic cancers and it is still considered as undruggable. Computational repositioning of FDA-approved drugs that could counteract the oncogenic activity of KRAS allowed to identify decitabine, an analogue of cytidine, as a potential growth inhibitor of PDAC tumors that are dependent on the oncogene. In my research activity, molecular mechanisms of response to decitabine, as DNA-damage and regulation of DNA methylation/demethylation were examined.

The opportunity and the effect of a combined treatment of Decitabine with Olaparib, a PARP inhibitor, has also been studied. Next, the molecular mechanism underlying KRAS dependency and the sensitivity to decitabine of KRAS-dep PDAC tumor cells was explored.

These studies allowed me to acquire new expertise in cancer genetics and molecular oncology.

TECHNICAL SKILLS

Maintenance of cancer cell culture; Immunofluorescences, confocal microscopy; nucleic acid quantification (Nanodrop); RNA extraction; cDNA synthesis; qPCR; assessment of DNA damage with Comet Assay; evaluation of pharmacological interaction with Combination Index.

PERSONAL SKILLS

Mother tongue(s) Italian

Other languages English (level B2)

Other skills Good relational skills in different contexts, ability to work in group, methodical organizational skills of the assigned work, knowledge of principal bioinformatic browsers and databases, remarkable knowledge of Office suite.