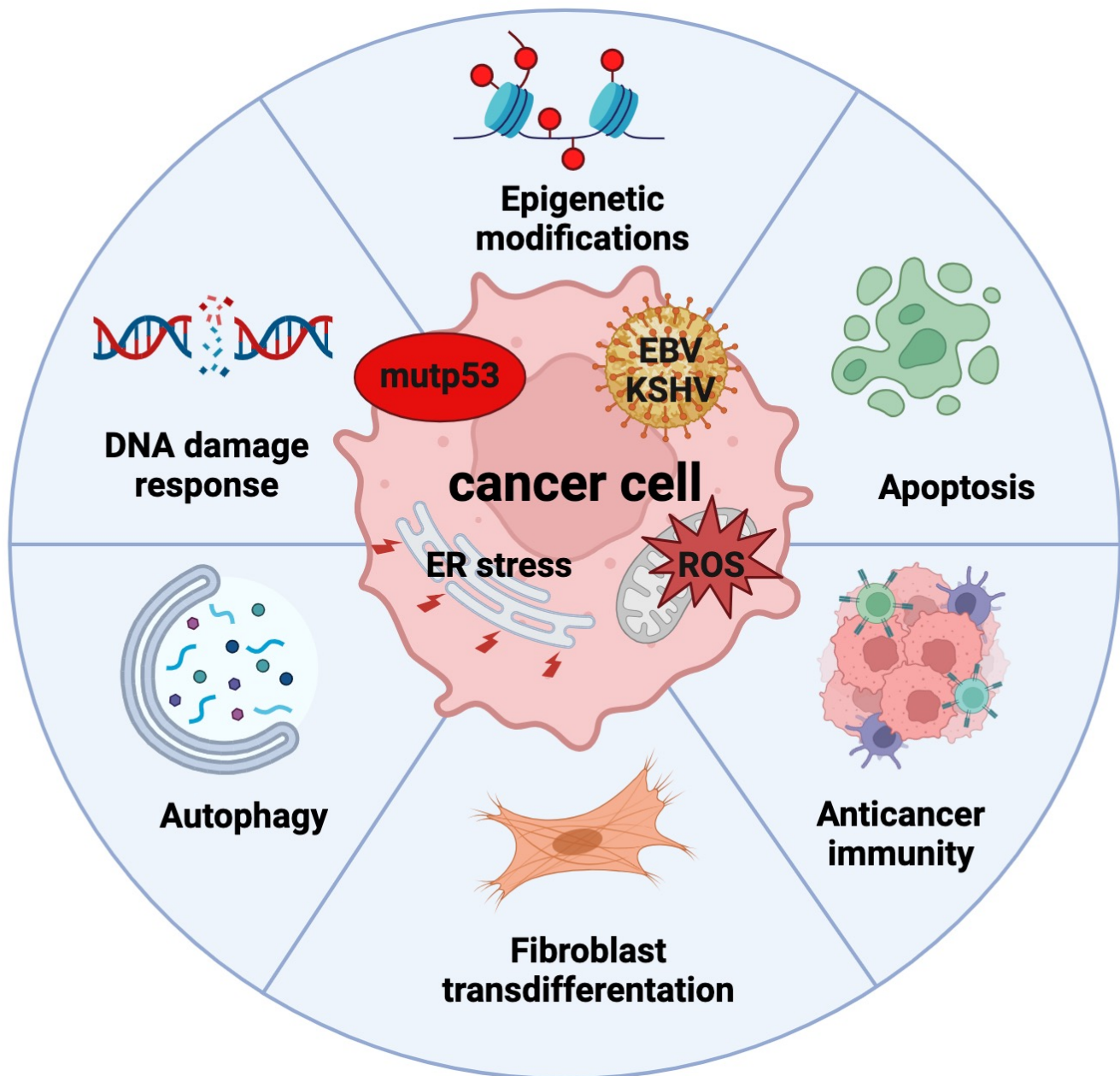


Immuno-oncologia virale



Our laboratory is focused on carcinogenesis, particularly that associated with gammaherpesviruses and mutant p53 and their role in regulation of epigenetic, ER stress, DDR, autophagy and anti-cancer immune-response.

Role	Name	Position	E-mail	Publications	Keywords
Lab head	Prof. Mara Cirone	Associate professor	mara.cirone@uniroma1.it	https://pubmed.ncbi.nlm.nih.gov/?term=cirone+mar+a&sort=date&size=100	EBV KSHV Mutant p53 ER stress DDR autophagy epigenetic
Lab member	Prof. Maria Saveria Gilardini Montani	Associate Professor	mariasaveria.gilardinimontani@uniroma1.it	https://pubmed.ncbi.nlm.nih.gov/?term=maria+saveria+gilardini+montani&sort=date&size=100	Mutant p53 Pancreatic cancer epigenetic
Lab member	Prof. Roberta Santarelli	Associate Professor	roberta.santarelli@uniroma1.it	https://pubmed.ncbi.nlm.nih.gov/?term=santarelli+roberta&sort=date&size=100	EBV KSHV Autophagy epigenetic
Lab member	Prof. Roberta Gonnella	Associate Professor	roberta.gonnella@uniroma1.it	https://pubmed.ncbi.nlm.nih.gov/?term=gonnella+roberta&sort=date&size=100	EBV KSHV ER stress DDR
Lab member	Dr Rossella Benedetti	Post-Doc Research fellow	rossella.benedetti@uniroma1.it	https://pubmed.ncbi.nlm.nih.gov/?term=benedetti+rossella&sort=date&size=100	Autophagy mutp53 ER stress DDR
Lab member	Dr Michele Di Crosta	PhD student	michele.dicrosta@uniroma1.it	https://pubmed.ncbi.nlm.nih.gov/?term=di+crosta+michele&sort=date&size=100	Mutant p53 cancer

Previous and current research

Gammaherpesvirus biology (EBV and KSHV) and mechanisms regulating latent to lytic switch in tumor cells that harbor latent gammaherpesvirus infection. Molecular pathways involved in the oncogenic capacity of oncoviruses and related to the presence of mutant forms of p53. Our interest also includes the cross-talk between tumor cells and cells in the tumor environment, particularly in correlation with the epigenetic changes, ER stress, autophagy and DNA damage induced by oncoviruses and oncogenes.

Selected Publications

[ATF6 supports lysosomal function in tumor cells to enable ER stress-activated macroautophagy and CMA: impact on mutant TP53 expression.](#)
Benedetti R, Romeo MA, Arena A, Gilardini Montani MS, D'Orazi G, Cirone M. *Autophagy*. 2024 Apr 9;1-14. doi: 10.1080/15548627.2024.2338577. Online ahead of print.PMID: 38566314

[New insights into the Bortezomib-induced cytotoxic and resistance mechanisms in a primary effusion lymphoma mouse model.](#)
Romeo MA, Focaccetti C, Arena A, Benedetti R, Di Crosta M, Palumbo C, Gilardini Montani MS, Santarelli R, Gonnella R, D'Orazi G, Bei R, Cirone M. *Hematol Oncol*. 2024 Mar;42(2):e3262. doi: 10.1002/hon.3262.PMID: 38450785 No abstract available.

[HSP110 Inhibition in Primary Effusion Lymphoma Cells: One Molecule, Many Pro-Survival Targets.](#)
Gonnella R, Zarrella R, Di Crosta M, Benedetti R, Arena A, Santarelli R, Gilardini Montani MS, D'Orazi G, Cirone M. *Cancers (Basel)*. 2023 Nov 29;15(23):5651. doi: 10.3390/cancers15235651.PMID: 38067355

[EBV infection of primary colonic epithelial cells causes inflammation, DDR and autophagy dysregulation, effects that may predispose to IBD and carcinogenesis.](#)
Santarelli R, Evangelista L, Pompili C, Lo Presti S, Rossi A, Arena A, Gaeta A, Gonnella R, Gilardini Montani MS, Cirone M. *Virus Res*. 2023 Dec;338:199236. doi: 10.1016/j.virusres.2023.199236. Epub 2023 Oct 12.PMID: 37797746

[Acetylation increases expression, interaction with TRAPPC4 and surface localization of PD-L1.](#)
Romeo MA, Gilardini Montani MS, Santarelli R, Benedetti R, Arena A, Cirone M. *Discov Oncol*. 2023 Aug 21;14(1):152. doi: 10.1007/s12672-023-00766-4.PMID: 37603071

[HSPs/STAT3 Interplay Sustains DDR and Promotes Cytokine Release by Primary Effusion Lymphoma Cells.](#)
Gonnella R, Arena A, Zarrella R, Gilardini Montani MS, Santarelli R, Cirone M. *Int J Mol Sci*. 2023 Feb 15;24(4):3933. doi: 10.3390/ijms24043933.PMID: 36835344

[Different outcome of targeting ERN1/IRE1 alpha and EIF2AK3/PERK in NSG mice engrafted with primary effusion lymphoma.](#)
Arena A, Romeo MA, Focaccetti C, Anastasiadou E, Trivedi P, Cifaldi L, Gilardini Montani MS, Benedetti R, Santarelli R, Gonnella R, Benvenuto M, Marchese C, Masuelli L, Bei R, Cirone M. *Br J Haematol*. 2023 Apr;201(2):e12-e15. doi: 10.1111/bjh.18688. Epub 2023 Feb 12.PMID: 36775956

[ATF6 prevents DNA damage and cell death in colon cancer cells undergoing ER stress.](#)
Benedetti R, Romeo MA, Arena A, Gilardini Montani MS, Di Renzo L, D'Orazi G, Cirone M. *Cell Death Discov*. 2022 Jun 25;8(1):295. doi: 10.1038/s41420-022-01085-3.PMID: 35752616

[p62/SQSTM1 promotes mitophagy and activates the NRF2-mediated antioxidant and anti-inflammatory response restraining EBV-driven B lymphocyte proliferation.](#)
Gilardini Montani MS, Tarquini G, Santarelli R, Gonnella R, Romeo MA, Benedetti R, Arena A, Faggioni A, Cirone M. *Carcinogenesis*. 2022 Apr 25;43(3):277-287. doi: 10.1093/carcin/bgab116.PMID: 34958370

[DNA damage triggers an interplay between wtp53 and c-Myc affecting lymphoma cell proliferation and Kaposi sarcoma herpesvirus replication.](#)
Arena A, Gilardini Montani MS, Romeo MA, Benedetti R, Gaeta A, Cirone M. *Biochim Biophys Acta Mol Cell Res*. 2022 Jan;1869(1):119168. doi: 10.1016/j.bbamcr.2021.119168. Epub 2021 Oct

[PGE2 Released by Pancreatic Cancer Cells Undergoing ER Stress Transfers the Stress to DCs Impairing Their Immune Function.](#)
Gilardini Montani MS, Benedetti R, Piconese S, Pulcinelli FM, Timperio AM, Romeo MA, Masuelli L, Mattei M, Bei R, D'Orazi G, Cirone M. *Mol Cancer Ther*. 2021 May;20(5):934-945. doi: 10.1158/1535-7163.MCT-20-0699. Epub 2021 Feb 25.PMID: 33632872

[KSHV dysregulates bulk macroautophagy, mitophagy and UPR to promote endothelial to mesenchymal transition and CCL2 release, key events in viral-driven sarcomagenesis.](#)
Santarelli R, Arteni AMB, Gilardini Montani MS, Romeo MA, Gaeta A, Gonnella R, Faggioni A, Cirone M. *Int J Cancer*. 2020 Dec 15;147(12):3500-3510. doi: 10.1002/ijc.33163. Epub 2020 Jul 23.PMID: 32559816

Grants/Projects/Open Positions/Conferences

AIRC IG 2019-23040
PRIN 2022

