

Eleonora Malavasi

EDUCATION

- Gen 2022 – Dec 2024 **PhD student in Biomedical Sciences and Biotechnology**
University of Udine
Thesis: Study of a new therapeutic compound for the treatment of aggressive leiomyosarcoma
- Oct 2018 – Mar 2021 **Master's degree in Molecular and Medical Biotechnology**
University of Verona
Thesis: Cortical profile of Spinal Muscular Atrophy SMA Δ 7 mouse model: an immunohistochemical study
- Sep 2015 – Sep 2018 **Bachelor's degree in Biomolecular Sciences and Technology**
University of Trento
Thesis: Pharmacology of autophagy: characterization of biologically active molecules

LANGUAGES

- Native language Italian
Other languages English:
- Reading: C1
 - Writing: B2
 - Speaking: B2

WORK AND RESEARCH EXPERIENCES

- Jan 2022 – Dec 2024 **PhD project**
University of Udine, Udine (IT)
Project: Identification of new therapeutic compounds against aggressive leiomyosarcoma with reduced environmental impact, which are characterized by an absence/reduced DNA damage activity. Characterization of the newly identified XMH95 compound.
- Nov 2022 – Apr 2023 **PhD Company Internship**
Stingray Bio Limited, Cambridge (UK)
Project: Study of new compounds targeting essential kinases to impact mRNA splicing and generate therapeutics for cancer patients through the evaluation of nuclear speckles with High Content Imaging (HCI).

Sep 2020 – Feb 2021

Master's Internship

Neuroscience Institute Cavalieri Ottolenghi (NICO), Turin (IT)

Project: Investigation of cortical architecture alterations in Spinal Muscular Atrophy (SMA) brain. Analysis of SMA effects on motor and somatosensory cortices, using SMA Δ 7 mouse model, addressing both interneuron and projection neuron differences.

Nov 2017 – Mar 2018

Bachelor's Internship

CIBIO, University of Trento, Trento (IT)

Project: Evaluation of a custom-made library of compounds to evaluate toxicity and autophagy induction as a therapeutic approach in the treatment of Parkinson's disease.

OTHER RELATED ACTIVITY

Oct 2023 – Sep 2024

Tutor for incoming student orientation

University of Udine

RELATED COURSES

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| - Biostatistics | <i>University of Udine</i> |
| - Confocal microscopy | <i>University of Udine</i> |
| - Cytofluorimetry | <i>University of Udine</i> |
| - Oxygen consumption using Seahorse | <i>University of Udine</i> |
| - System Biology and Artificial Intelligence | <i>University of Udine</i> |
| - Biacore X100 system training | <i>Cytiva</i> |

TECHNICAL SKILLS

Molecular biology: Western blot, PCR, RT-PCR, qPCR, immunofluorescence, High content imaging (HCI), RNA and DNA extraction, cloning.

Cellular biology: Cell cultures, spheroids, drug treatments, invasion assay, ATP light assay, caspase assay, MTT, crystal violet assay, transfections.

Tools & Software: GraphPad Prism, ImageJ, LAS X, Microsoft Office.

SOFT SKILLS

- Excellent communication skills acquired during laboratory activities, internships and PhD meetings.
- Strong teamwork abilities developed through laboratory activities.
- Excellent organizational skills gained during internships and doctoral research.

POSTERS

1. Teresa Gagliano, Eleonora Malavasi, Francesca Cuomo, Massimo Faggiani, Emiliano Dalla, Claudio Brancolini. HDAC7 influence proliferation and invasion of colorectal cancer cells by modulating E-Cadherin and Nur77. Seville (ES), EACR 2022. (Not present at the congress).
2. Eleonora Malavasi, Sowmya Mallarupavu, Martina Minisini, Raffaella Picco, Emiliano Dalla, Teresa Gagliano & Claudio Brancolini. Identification and characterization of a new anti-neoplastic compound with selectivity against highly aggressive leiomyosarcoma cell lines and other aggressive cancer cells. Venice (IT), SIC 2022. (Not present at the congress).
3. Eleonora Malavasi, Teresa Gagliano & Claudio Brancolini. Identification and characterization of a novel anti-neoplastic compound with no DNA damage activity in colorectal cancer. Florence (IT), EACR 2023 conference.
4. Teresa Gagliano, Emanuela Kerschbamer, Eleonora Malavasi, Christian Weichenberger, Umberto Baccarani, Giovanni Terrosu, Claudio Brancolini. Genetic and epigenetic characterization of human colorectal cancer: from tissues to organoids. Turin (IT), EACR 2023 annual congress.
5. Eleonora Malavasi, Rino Ragno, Martina Minisini, Raffaella Picco, Sowmya Mallavarapu, Claudio Brancolini. XMH95: a new apoptotic strategy against aggressive leiomyosarcoma. Bologna (IT), ABCD 2024 National Ph.D Meeting.

PUBLICATIONS

1. Iuliano L, Dalla E, Picco R, Mallavarapu S, Minisini M, Malavasi E, Brancolini C. Proteotoxic stress-induced apoptosis in cancer cells: understanding the susceptibility and enhancing the potency. *Cell Death Discov.* 8, 407 (2022). <https://doi.org/10.1038/s41420-022-01202-2>
2. Malavasi E, Giamas G. & Gagliano T. Estrogen receptor status heterogeneity in breast cancer tumor: role in response to endocrine treatment. *Cancer Gene Ther* (2023). <https://doi.org/10.1038/s41417-023-00618-x>
3. Malavasi E, Picco R, Mallavarapu S, Minisini M, D'Este F, Bertozzo A, Giuliani L, Astolfi R, Chinellato M, Bettin G, Bortoluzzi M, Ragno R, Angelini A, Brancolini C. Identification of a novel minor-groove DNA binder that represses mitochondrial genes expression and induces apoptosis in highly aggressive leiomyosarcoma cells. Submitted at *Cell Chemical Biology* (18 March 2025).