

Damanti Carlotta Caterina



English (fluent),
French (intermediate),
Italian (native language)



MS Office incl.
Powerpoint & Excel,
GraphPad, Photoshop,
Fiji



-DNA, RNA and protein
isolation, gel
electrophoresis, PCR,
western blot, ELISA,
cell free DNA isolation,
ddPCR, qRT-PCR.
-Cell lines maintenance,
primary cells isolation and
culture (mesenchymal
stromal cells, PBMC,
immune cells, etc.), *in vitro*
cell assays (migration,
viability, clonogenicity,
drug treatments, co-
cultures, differentiation,
etc.),
-Human samples collection
(blood, bone marrow,
tumor biopsies, etc.) and
storage.
- Cytofluorimetry, FACS
samples preparation,
immunofluorescence
-Extracellular vesicles
isolation and
characterization (NTA)



About me

“During my PhD in oncohematology I acquired a wide experience in molecular and cellular biology techniques, applied not only to research but also to diagnostic. I deepened my understanding of experimental planning and protocol design with the focus on disclosing disease mechanisms to improve patients’ diagnostic and therapies. I focused my research interest on the study of tumor microenvironment modulation mediated by extracellular vesicles. With my strong motivation and expertise, I want to continue to work in research field to give a more concrete contribution to people’s lives”



Relevant work experience

- 05/2018 – 07/2023 Istituto di Ricerca Pediatrica Città della Speranza, Padua, Italy | Dr. Lara Mussolin Lab (Non-Hodgkin Lymphoma Unit)
- PhD student: study of the role of small-extracellular vesicles in cell-to-cell communication applying molecular and cellular biology methodologies.
 - Patients’ samples handling and molecular diagnostic of pediatric non-Hodgkin lymphomas
 - National grants: AIRC grant “Identification of new biomarker of disease aggressiveness in Non-Hodgkin Lymphoma of childhood: the role of liquid biopsy”; IRP Sinergy Grant “The role of exosomes in treatment response kinetics and tumour microenvironment modulation in pediatric B-lineage leukemias”
- 01/2016 – 06/2016 Gustave Roussy, Villejuif, France | Dr. Isabelle Plo Lab
- Master internship: main molecular biology techniques, blood samples managing, primary cells purification (Ficoll density gradient, autoMACS, flow cytometry) and cell culture.



Education

- 10/2019 – 03/2023 University of Padua | Department of Maternal and Child Health
Ph.D. course in Developmental Medicine and Health Planning Sciences
Curriculum: Oncohematology, Medical Genetics, Rare Diseases and Predictive Medicine
- Thesis: “The role of small extracellular vesicles in the modulation of premetastatic niche and tumor microenvironment in pediatric lymphomas”
- 10/2014 - 09/2016 University Paris Diderot & University of Padua | Double Master’s Program
- Master’s program in Molecular Biology & Magistère Européen de Génétique, M2
 - Thesis: “Role of new predisposing factor (EPOR P488S) in myeloproliferative neoplasms”
 - 107/110
- 10/2011 – 09/2014 University of Padua
Bachelor’s degree in Molecular Biology
- Lectures on biology-related topics and methodological trainings. Two months internship in the pharmacology department of Padua where I acquired some basic information about HPLC and enzymatic *in vitro* assay.
 - 98/110



Damanti CC, Ferrone L, Gaffo E, Garbin A, Tosato A, Contarini G, Galligani I, Angioni R, Molon B, Borile G, Carraro E, Pillon M, Scarmozzino F, Dei Tos AP, Pizzi M, Ciscato F, Rasola A, Biffi A, Bortoluzzi S, Lovisa F, Mussolin L. Plasma small-extracellular vesicles enriched in miR-122-5p promote disease aggressiveness in pediatric anaplastic large-cell lymphoma. *Cancer Commun (Lond)*. 2023 May;43(5):630-634. doi: 10.1002/cac2.12415. Epub 2023 Apr 4. PMID: 37014813; PMCID: PMC10174085

Rabadan Moraes G, Pasquier F, Marzac C, Deconinck E, **Damanti CC**, Leroy G, El-Khoury M, El Nemer W, Kiladjian JJ, Raslova H, Najman A, Vainchenker W, Marty C, Bellanné-Chantelot C, Plo I. An inherited gain-of-function risk allele in EPOR predisposes to familial JAK2^{V617F} myeloproliferative neoplasms. *Br J Haematol*. 2022 Jul;198(1):131-136. doi: 10.1111/bjh.18165. Epub 2022 Mar 30. PMID: 35355248.

Lovisa F, Galligani I, Varotto E, Pasin C, Carraro E, Michielotto B, Garbin A, **Damanti CC**, Pizzi M, d'Amore ESG, Piglione M, Muggeo P, Buffardi S, Vinti L, Folsi VM, Onofrillo D, Biffi A, Buldini B, Pillon M, Mussolin L. Prognostic Role of Minimal Disseminated Disease and *NOTCH1/FBXW7* Mutational Status in Children with Lymphoblastic Lymphoma: The AIEOP Experience. *Diagnostics (Basel)*. 2021 Sep 1;11(9):1594. doi: 10.3390/diagnostics11091594. PMID: 34573936; PMCID: PMC8468850.

Di Battista P, Lovisa F, Gaffo E, Galligani I, **Damanti CC**, Garbin A, Ferrone L, Carraro E, Pillon M, Lo Nigro L, Mura R, Pizzi M, Guzzardo V, Dei Tos AP, Biffi A, Bortoluzzi S, Mussolin L. Low miR-214-5p Expression Correlates With Aggressive Subtypes of Pediatric ALCL With Non-Common Histology. *Front Oncol*. 2021 May 25;11:663221. doi: 10.3389/fonc.2021.663221. PMID: 34113568; PMCID: PMC8185221.

Lovisa F, Garbin A, Crotti S, Di Battista P, Galligani I, **Damanti CC**, Tosato A, Carraro E, Pillon M, Mafakheri E, Romanato F, Gaffo E, Biffi A, Bortoluzzi S, Agostini M, Mussolin L. Increased Tenascin C, Osteopontin and HSP90 Levels in Plasmatic Small Extracellular Vesicles of Pediatric ALK-Positive Anaplastic Large Cell Lymphoma: New Prognostic Biomarkers? *Diagnostics (Basel)*. 2021 Feb 6;11(2):253. doi: 10.3390/diagnostics11020253. PMID: 33562105; PMCID: PMC7915848.

Garbin A, Lovisa F, Holmes AB, **Damanti CC**, Galligani I, Carraro E, Accordi B, Veltri G, Pizzi M, d'Amore ESG, Pillon M, Biffi A, Basso K, Mussolin L. miR-939 acts as tumor suppressor by modulating JUNB transcriptional activity in pediatric anaplastic large cell lymphoma. *Haematologica*. 2021 Feb 1;106(2):610-613. doi: 10.3324/haematol.2019.241307. PMID: 32299901; PMCID: PMC7849582.

Damanti CC, Gaffo E, Lovisa F, Garbin A, Di Battista P, Galligani I, Tosato A, Pillon M, Carraro E, Mascarini M, Elia C, Biffi A, Bortoluzzi S, Mussolin L. MiR-26a-5p as a Reference to Normalize MicroRNA qRT-PCR Levels in Plasma Exosomes of Pediatric Hematological Malignancies. *Cells*. 2021 Jan 8;10(1):101. doi: 10.3390/cells10010101. PMID: 33429910; PMCID: PMC7827902.

Mussolin L, Lovisa F, Galligani I, Cavallaro E, Carraro E, **Damanti CC**, Vinti L, Sala A, Micalizzi C, Santoro N, Piglione M, Cellini M, Buffardi S, Buldini B, D'Amore ESG, Biffi A, Pillon M. Minimal residual disease analysis in childhood mature B-cell leukaemia/lymphoma treated with AIEOP LNH-97 protocol with/without anti-CD20 administration. *Br J Haematol*. 2020 May;189(3):e108-e111. doi: 10.1111/bjh.16531. Epub 2020 Feb 20. PMID: 32080837.

Lovisa F, Di Battista P, Gaffo E, **Damanti CC**, Garbin A, Galligani I, Carraro E, Pillon M, Biffi A, Bortoluzzi S, Mussolin L. *RNY4* in Circulating Exosomes of Patients With Pediatric Anaplastic Large Cell Lymphoma: An Active Player? *Front Oncol*. 2020 Feb 27;10:238. doi: 10.3389/fonc.2020.00238. PMID: 32175280; PMCID: PMC705687

**Damanti
Carlotta Caterina**

C.C. Damanti, F. Lavinia, E. Gaffo, A. Garbin, A. Tosato, G. Contarini, I. Galligani, R. Angioni, B. Molon, G. Borile, E. Carraro, M. Pillon, F. Scarmozzino, A.P. Dei Tos, M. Pizzi, F. Ciscato, A. Rasola, A. Biffi, S. Bortoluzzi, F. Lovisa, L. Mussolin "Il Mir-122-5p Epatico Circolante Promuove L'aggressività Del Linfoma Anaplastico A Grandi Cellule Del Bambino". Oral presentation AIEOP... IN LAB, May, Catania, 26-27 2023,

C.C.Damanti, A.Cani, F.Lovisa, E.Gaffo, G.Borile, A.Garbin, I.Galligani, L.Ferrone, A.Tosato, G.Contarini, E.Carraro, M.Pillon, S.Bortoluzzi, A.Biffi, S.Bresolin, L.Mussolin. "Plasma S-Evs miRNAs in Pediatric B mALL: Tumor Biomarkers and Transforming Factors of Bone Marrow Niche". 7° INTERNATIONAL SYMPOSIUM ON CHILDHOOD, ADOLESCENT AND YOUNG ADULT NHL, NY-USA, October 20-23, 2022

C.C.Damanti, A.Cani, F.Lovisa, E.Gaffo, G.Borile, A.Garbin, I.Galligani, L.Ferrone, A.Tosato, G.Contarini, E.Carraro, M.Pillon, S.Bortoluzzi, A.Biffi, S.Bresolin, L.Mussolin."Plasma S-Evs miRNAs in Pediatric B-mALL: Tumor Biomarkers and Transforming Factors of Bone Marrow Niche" Retreat IRP2022, Galzignano (PD), September 29-30, 2022

C.C.Damanti, L.Ferrone, E.Gaffo, A.Garbin, A.Tosato, G.Contarini, I.Galligani, R.Angioni, B.Molon, G.Borile, E.Carraro, M.Pillon, F.Scarmozzino, A.P. DeiTos, Marco Pizzi, F.Ciscato, A.Rasola, A.Biffi, S.Bortoluzzi, F.Lovisa, L.Mussolin. "Il mir-122-5p epatico circolante promuove l'aggressività del linfoma anaplastico a grandi cellule del bambino". 49 CONGRESSO NAZIONALE SIE, Roma, September 26-28, 2022

C.C.Damanti, A.Cani, F.Lovisa, E.Gaffo, G.Borile, A.Garbin, I.Galligani, P.Bertolini, E.Facchin, K.Perruccio, R.Mura, M.L.Moleti, M.Cellini, D.Sperli, L.Ferrone, A.Tosato, G.Contarini, E.Carraro, M.Pillon, A.Biffi, S.Bresolin, L.Mussolin. "Il ruolo degli esosomi come biomarcatori tumorali e modulatori del microambiente nelle b-mALL". XLVI Congresso Nazionale AIEOP-VIRTUAL, October 3-8, 2021

C.C.Damanti, F.Lovisa, A.Garbin, I.Galligani, E.Carraro, M.Pillon, A.Biffi, L.Mussolin. "Evaluation of total and tumour-derived cfDNA in pediatric non-Hodgkin lymphomas". Retreat IRP2019, Villa Condulmer (Mogliano,TV) October 4-5, 2019