

Curriculum Vitae

Name **MARTINA FERRANTE**

Place of Birth Moncalieri (TO)

Citizenship Italian

Professional Experiences

01/07/2020 – present **Postgraduate fellowship**

Molecular Biology lab, Hematology division, Department of Molecular Biotechnology and Health Sciences, University of Torino (Via Genova 3, Torino)

Research project *“Screening and minimal residual disease monitoring of MYD88L265P mutation in Waldenström’s Macroglobulinemia and IgM monoclonal gammopathy of undetermined significance by non invasive approaches”*

01/07/2019 – 30/06/2020 **Research fellow**

Molecular Biology lab, Hematology division, Department of Molecular Biotechnology and Health Sciences, University of Torino (Via Genova 3, Torino)

Research project *“Prospective analysis of minimal residual disease in mantle cell lymphoma and biobanking of the “Triangle” phase III clinical trial”*

01/03/2019 – 30/06/2019 **Postgraduate fellowship**

Molecular Biology lab, Hematology division, Department of Molecular Biotechnology and Health Sciences, University of Torino (Via Genova 3, Torino)

Research project *“Minimal residual disease (MRD) analysis by next-generation sequencing (NGS) in follicular lymphoma (FL) patients lacking a molecular marker: application to the FIL 'FOLL12' trial”*

02/01/2018 – 31/12/2018 **Postgraduate fellowship - “Damiano per l'Ematologia”**

Molecular Biology lab, Hematology division, Department of Molecular Biotechnology and Health Sciences, University of Torino (Via Genova 3, Torino)

Research project *“Non invasive diagnostic and monitoring of minimal residual disease in patients affected by Waldenström’s Macroglobulinemia”*

20/11/2015 - 18/10/2017 **Undergraduate training**

Molecular Biology lab, Hematology division, Department of Molecular Biotechnology and Health Sciences, University of Torino (Via Genova 3, Torino)

Research project *Droplet digital PCR assays for identifications of molecular markers in lymphoproliferative disorders*

25/07/2012 - 30/09/2014 **Undergraduate training**

Pharmacology lab – Amedeo di Savoia Hospital, Torino (Corso Svizzera 164, Torino)

Research project *Therapeutic drug monitoring by Liquid chromatography HPLC e UPLC- MS, MSMS*

Education

01/11/2018 - present	PhD student in Molecular Medicine (XXXIV cycle) Department of Molecular Biotechnology and Health Sciences, University of Turin Research project <i>“Non-invasive diagnostic tools for minimal residual disease monitoring in lymphoproliferative disorders”</i>
1/10/2015 – 19/10/2017	Master Degree in Medical Biotechnology Graduation Mark: 110/110; recommendation for publication University of Torino
1/10/2010 – 10/10/2014	Bachelor Degree in Biotechnology Graduation Mark: 102/110 University of Torino
1/09/2005 – 10/07/2010	High School Diploma Graduation Mark: 80/100 Liceo Socio Psico Pedagogico “Domenico Berti” - Torino
Foreign languages	English (level B2)
Technical Knowledge	Molecular Biology techniques: DNA extraction from different tissues, ASO primers and probes identification, qualitative and quantitative PCR, droplet digital PCR, Next Generation Sequencing (NGS), marker screening and monitoring for minimal residual disease.
Informatic Knowledge	Microsoft Office, databases and software for sequence analysis (Blast, IgBlast, IMGT, Chromas, CLC Sequence Viewer), for statistical analysis (GraphPad), REDCap (Research Electronic Data Capture), biobanking (EasyTrack2D software).
Personal skills	Excellent organizational skills for planning experiments. Excellent working skills in high-workload situations and prioritize work when needed. I am a smart and reliable person, flexible and able to adapt quickly to new situations.
Scientific Interests	<ul style="list-style-type: none"> • Management of clinical trials samples of lymphoproliferative diseases • Minimal residual disease assessment by PCR and Next Generation Sequencing in non-Hodgkin lymphoma • Molecular pathogenesis of indolent and aggressive lymphomas • Genetics of immunoglobulin genes and chromosomal translocations • Biological prognostic factors in non-Hodgkin lymphoma
Hobbies	Cooking, reading, jogging
Driving license	B (own car)

PUBLICATIONS

1. Daniela Drandi, Martina Ferrante, Michela Borriero, Simone Ferrero. **MYD88 L265P MUTATION DETECTION BY DDPCR: RECOMMENDATIONS FOR SCREENING AND MINIMAL RESIDUAL DISEASE MONITORING.** In press.
2. D. Drandi, P. Decruyenaere, M. Ferrante, F. Offner, J. Vandesompele, S. Ferrero. **NUCLEIC ACID BIOMARKERS IN WALDENSTRÖM MACROGLOBULINEMIA AND IGM-MGUS: CURRENT INSIGHTS AND CLINICAL RELEVANCE.** *Diagnostics* 2022, 12(4), 969.
3. B. Mantoan, E. Genuardi, M. Ferrante, I. Della Starza, E. Ciabatti, S. Grassi, L. Anna De Novi, M. Cavalli, C. Mannu, A. Gazzola, R. Bomben, M. Degan, B. Alessandria, C. Pott, M. Delfau-Larue, R. Garcia Sanz, C. Agostinelli, V. Gattei, S. Galimberti, I. Del Giudice, M. Ladetto, G. Gaidano, S. Ferrero and D. Drandi. On behalf of the Fondazione Italiana Linfomi (FIL) MRD Network. **QUALITY ASSESSMENT FOR PCR-BASED MINIMAL RESIDUAL DISEASE IN LYMPHOMA: 10 YEARS OF CROSS-LAB STANDARDIZATION PROCESS WITHIN THE FONDAZIONE ITALIANA LINFOMI MRD NETWORK.** *HemaSphere* vol. 5,10 e639. 6 Sep. 2021
4. Ferrante M, Furlan D, Zibellini S, Borriero M, Candido C, Sahnane N, Uccella S, Genuardi E, Alessandria B, Bianchi B, Mora B, Grimaldi D, Defrancesco I, Jiménez C, Cavallo F, Ferrero D, Dogliotti I, Merli M, Varettoni M, Ferrero S, Drandi, D. **MYD88L265P DETECTION IN IGM MONOCLONAL GAMMOPATHIES: METHODOLOGICAL CONSIDERATIONS FOR ROUTINE IMPLEMENTATION.** *Diagnostics* 2021, 11(5), 779; <https://doi.org/10.3390/diagnostics11050779>.
5. Genuardi E, Klous P, Mantoan B, Drandi D, Ferrante M, Cavallo F, Alessandria B, Dogliotti I, Grimaldi D, Ragaini S, Clerico M, Lo Schirico M, Saraci E, Yilmaz M, Zaccaria GM, Cortelazzo S, Vitolo U, Luminari S, Federico M, Boccadoro M, van Min M, Splinter E, Ladetto M, Ferrero S. **TARGETED LOCUS AMPLIFICATION TO DETECT MOLECULAR MARKERS IN MANTLE CELL AND FOLLICULAR LYMPHOMA.** *Hematol Oncol.* 2021 Mar 20. doi: 10.1002/hon.2864. Epub ahead of print. PMID: 33742718.
6. Ladetto M., Coll C., Ferrante M., Grimaldi D., Christiane P. **MINIMAL RESIDUAL DISEASE (MRD) IN INDOLENT LYMPHOMAS.** In: Dreyling M., Ladetto M. (eds) *Indolent Lymphomas. Hematologic Malignancies.* Springer, Cham. 28 January 2021
7. Della Starza I, De Novi LA, Cavalli M, Novelli N, Soscia R, Genuardi E, Mantoan B, Drandi D, Ferrante M, Monitillo L, Barbero D, Ciabatti E, Grassi S, Bomben R, Degan M, Gattei V, Galimberti S, Di Rocco A, Martelli M, Cortelazzo S, Guarini A, Foà R, Ladetto M, Ferrero S, Del Giudice I; Fondazione Italiana Linfomi (FIL) MRD Network. **IMMUNOGLOBULIN KAPPA DELETING ELEMENT REARRANGEMENTS ARE CANDIDATE TARGETS FOR MINIMAL RESIDUAL DISEASE EVALUATION IN MANTLE CELL LYMPHOMA.** *Hematol Oncol.* 2020 Aug 20. Online ahead of print.
8. Drandi D, Alcantara M, Benmaad I, Söhlbrandt A, Lhermitte L, Zaccaria G, Ferrante M, Genuardi E, Mantoan B, Villarese P, Cheminant M, Starza ID, Ciabatti E, Bomben R, Jimenez C, Callanan M, Abdo C, Eckert C, Ribrag V, Cortelazzo S, Dreyling M, Hermine O, Delfau-Larue MH, Pott C, Ladetto M, Ferrero S, Macintyre E. **DROPLET DIGITAL PCR QUANTIFICATION OF MANTLE CELL LYMPHOMA FOLLOW-UP SAMPLES FROM FOUR PROSPECTIVE TRIALS OF THE EUROPEAN MCL NETWORK.** *Hemasphere.* 2020 Apr 3;4(2):e347.
9. Lo Schirico M, Ferrante M, Dogliotti I, Zamò A, Ferrero B, Bertuzzo D, Benevolo G, Omedè P, Cavallo F, Ladetto M, Boccadoro M, Drandi D, Ferrero S. **DROPLET DIGITAL PCR ASSAY FOR MYD88L265P: CLINICAL APPLICATIONS IN WALDENSTRÖM MACROGLOBULINEMIA.** *Hemasphere.* 2020 Jan 3;4(1):e324.
10. Grimaldi D, Genuardi E, Ferrante M, Ferrero S & Ladetto M. **MINIMAL RESIDUAL DISEASE IN INDOLENT LYMPHOMAS: A CRITICAL ASSESSMENT.** *Curr. Treat. Options Oncol.* 19, 71 (2018).
11. Drandi D, Genuardi E, Dogliotti I, Ferrante M, Jiménez C, Guerrini F, Schirico ML, Mantoan B, Muccio V, Lia G, Zaccaria GM, Omedè P, Passera R, Orsucci L, Benevolo G, Cavallo F, Galimberti S, Sanz RG, Boccadoro M, Ladetto M, Ferrero S. **HIGHLY SENSITIVE MYD88^{L265P} MUTATION DETECTION BY DROPLET DIGITAL POLYMERASE CHAIN REACTION IN WALDENSTRÖM MACROGLOBULINEMIA.** *Haematologica.* 2018 Jun;103(6):1029-1037.
12. Simiele M, Ariaudo A, De Nicolò A, Favata F, Ferrante M, Carcieri C, Bonora S, Di Perri G, D'Avolio A. **UPLC-MS/MS METHOD FOR THE SIMULTANEOUS QUANTIFICATION OF THREE NEW ANTIRETROVIRAL DRUGS, DOLUTEGRAVIR, ELVITEGRAVIR AND RILPIVIRINE, AND OTHER THIRTEEN ANTIRETROVIRAL AGENTS PLUS COBICISTAT AND RITONAVIR BOOSTERS IN HUMAN PLASMA.** *J. Pharm. Biomed. Anal.* 138, 223–230 (2017).

ABSTRACT

- D. Drandi, M. Ferrante, S. Zibellini, L. Marcheselli, E. Cappello, M. Borriero, S. Ragaini, I. Dogliotti, C. Varraso, F. Cavallo, A. Ferrari, M. Merli, G. Zamprognà, L. Laurenti, S. Tomasetti, E. Cencini, G. Loseto, S. Finotto, M. Marchetti, F. Re, A. Sica, J. Olivieri, C. Jimenez, N. Puig, C. Cavalloni, R. García-Sanz, M. Varettoni, S. Ferrero. **A NOVEL DROP-OFF DIGITAL PCR ASSAY FOR CXCR4 MUTATION SCREENING IN IGM GAMMOPATHIES: FIRST DATA FROM THE FONDAZIONE ITALIANA LINFOMI BIO-WM STUDY.** Accepted as poster presentation at EHA 2022
- B. Alessandria, E. Genuardi, A. M. Civita, D. Drandi, B. Mantoan, M. Ferrante, M. Borriero, S. Ragaini, G. Bondielli, G. M. Zaccaria, D. Barbero, V. Peri, S. Hohaus, G. Musraca, N. Cascavilla, C. Ghiggi, M. Tani, G. Gaidano, S. Volpetti, S. V. Usai, N. Di Renzo, S. Cortelazzo, M. Ladetto, S. Ferrero. **CLINICAL IMPACT OF IMMUNOGLOBULIN HEAVY CHAIN REPERTOIRE IN MANTLE CELL LYMPHOMA: A STUDY FROM THE FONDAZIONE ITALIANA LINFOMI (FIL) PHASE III MCL0208 TRIAL.** Accepted as poster presentation at EHA 2022
- I. Dogliotti, M. Parisi, M. Clerico, D. Bertuzzo, G. Benevolo, L. Orsucci, I. Schiavetti, A. Di Liberto, F. Cavallo, S. Ragaini, D. Drandi, M. Ferrante, M. Borriero, D. Ferrero, L. Lopiano, B. Ferrero, S. Ferrero. **RITUXIMAB TREATMENT FOR IGM-RELATED, ANTI MAG-ASSOCIATED POLYNEUROPATHIES: INTERDISCIPLINARY CHARACTERIZATION AND EVALUATION OF LONG TERM RESPONSE.** Accepted as oral presentation at XVII CONGRESSO NAZIONALE SIES (2022)
- S. Ferrero, E. Genuardi, I. Della Starza, S. Grassi, R. Bomben, B. Mantoan, D. Drandi, I. Dogliotti, B. Alessandria, M. Ferrante, S. Ragaini, C. Ghiggi, A. Pulsoni, S. Ronconi, M. Merli, C. Califano, C. Castellino, A. Bari, A. Conconi, L. Anna De Novi, I. Del Giudice, V. Gattei, S. Galimberti, M. Ladetto, S. Luminari, M. Federico. **NEXT GENERATION SEQUENCING PROVIDES NOVEL MOLECULAR MARKERS FOR MINIMAL RESIDUAL DISEASE MONITORING IN FOLLICULAR LYMPHOMA: BIOLOGICAL RESULTS FROM FONDAZIONE ITALIANA LINFOMI (FIL) FOLL12 TRIAL.** e-poster presentation. EHA2021 Virtual Congress
- M. Ferrante, S. Ferrero, D. Drandi, S. Zibellini, C. Candido, L. Marcheselli, M. Gilestro, C. Picone, I. Dogliotti, I. Defrancesco, A. Ferrari, M. Merli, G. Zamprognà, L. Laurenti, S. Tomasetti, E. Cencini, G. Loseto, D. Marino, M. Marchetti, F. Re, A. Sica, J. Olivieri, N. Puig, S. Rattotti, F. Cavallo, L. Arcaini, M. Boccadoro, R. Garcia Sanz, M. Varettoni. **DROPLET DIGITAL PCR FOR NON-INVASIVE MUTATIONAL SCREENING IN WALDENSTRÖM MACROGLOBULINEMIA AND IGM-MGUS: FIRST RESULTS OF THE FONDAZIONE ITALIANA LINFOMI (FIL) BIO-WM TRIAL.** XVI Congress of the Italian Society of Experimental Hematology. Abstract book. *Haematologica* ISSN 0390-6078 - Volume 105 OCTOBER 2020 - S2
- M. Varettoni, S. Ferrero, C. Picone, M. Gilestro, N. Puig, L. Marcheselli, I. Dogliotti, A. Ferrari, M. Merli, G. Zamprognà, L. Laurenti, S. Tomasetti, E. Cencini, G. Loseto, D. Marino, M. Marchetti, F. Re, A. Sica, J. Olivieri, C. Jiménez, S. Zibellini, D. Drandi, C. Candido, M. Ferrante, N. Fabbri, F. Cavallo, L. Arcaini, M. Boccadoro and R. Garcia-Sanz. **CHARACTERIZATION OF B-CELL AND PLASMA CELL COMPARTMENT BY EIGHT-COLOR MULTIPARAMETER FLOW CYTOMETRY IN PATIENTS WITH WALDENSTROM MACROGLOBULINEMIA PROSPECTIVELY ENROLLED IN THE FONDAZIONE ITALIANA LINFOMI (FIL) BIO-WM TRIAL.** Blood 136, 29–30 (2020).
- Ferrero S, D. Drandi, S. Zibellini, M. Ferrante, C. Candido, L. Marcheselli, M. Gilestro, C. Picone, I. Dogliotti, I. Defrancesco, A. Ferrari, M. Merli, G. Zamprognà, L. Laurenti, S. Tomasetti, E. Cencini, G. Loseto, D. Marino, M. Marchetti, F. Re, A. Sica, J. Olivieri, N. Puig, S. Rattotti, F. Cavallo, L. Arcaini, M. Boccadoro, R. Garcia-Sanz, M. Varettoni. **DROPLET DIGITAL PCR FOR NON-INVASIVE MUTATIONAL SCREENING IN WALDENSTRÖM MACROGLOBULINEMIA AND IGM-MGUS: FIRST RESULTS OF THE FONDAZIONE ITALIANA LINFOMI (FIL) BIO-WM TRIAL.** EHA Libr. EP1308, (2020).
- Ferrero S, Dogliotti I, Zibellini S, Ferrante M, Defrancesco I, Ruggeri M, Mergotti F, Benevolo G, Cavallo F, Omedè P, Candido C, Boccadoro M, Ladetto M, Arcaini L, Drandi D, Varettoni M. **MYD88^{L265P} MUTATION IN IGM-MGUS PATIENTS: HIGH DETECTION RATES BY DROPLET DIGITAL PCR.** Accepted as oral presentation at 10th International Workshop on Waldenström's Macroglobulinemia (IWWM10).
- Benevolo G, Ferrero S, Andriani A, Castiglione A, Baraldi A, Boccomini C, Cabras G, Califano C, Casula P, Cavallo F, Conconi A, Drandi D, Gaidano G, Gregorini A, Felici S, Ferrante M, Mannina D, Molinari AL, Musto P, Musuraca G, Passamonti F, Sartori R, Tani M, Varettoni M, Vitolo U, Orsucci L. **TREATMENT OF RELAPSED/REFRACTORY WALDENSTRÖM MACROGLOBULINEMIA PATIENTS: PRELIMINARY CLINICAL AND MOLECULAR RESULTS OF THE**

PHASE II BRB (BENDAMUSTINE, RITUXIMAB AND BORTEZOMIB) TRIAL OF THE FONDAZIONE ITALIANA LINFOMI (FIL). Accepted as oral presentation at 10th International Workshop on Waldenström's Macroglobulinemia (IWWM10).

MEETINGS

1. **48° CONGRESSO NAZIONALE SIE - 16° CONGRESSO NAZIONALE SIES - Milano, Mi.Co 24-27 Ottobre 2021**
Oral presentation: "Screening mutazionale in droplet digital PCR su biopsia liquida nella Macroglobulinemia di Waldenström e nelle MGUS IgM: risultati preliminari dello studio BIO-WM della fondazione italiana linfomi"
2. **29th EuroMRD meeting, Videoconference, 5-6 November 2020**
3. **8th ESLHO Symposium, Ghent, Belgium, 7-9 Nov 2019.**
Oral presentation: "Comparison of bone marrow, peripheral blood and cell-free DNA for MYD88L265P mutation detection and minimal residual disease monitoring in Waldenström Macroglobulinemia"
4. **47° Congresso Nazionale SIE (Italian Society of Hematology), Roma, Italy, 8-10 Oct 2019.**
Poster presentation: "ddPCR and AS-PCR comparison for MYD88(L265P) identification in CD19+ selected and unselected samples from WM and IgM-MGUS patients"
5. **UNDER40 in Hematology, Roma, Italy, 15-16 Nov 2018.**
Oral presentation: "Non invasive diagnostics of MYD88(L265P) in Waldenström Macroglobulinemia and IgM-MGUS patients"

In compliance with the Italian legislative Decree no. 196 dated 30/06/2003, and art. 13 of EU Regulation 2016/679 concerning the protection of individuals personal data, I hereby authorize to use and process my personal details contained in this document.

Torino, 11/05/2022

Martina Ferraro