

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Matteo Claudio Da Vià Date of Birth: 23/08/1984

POSITION TITLE: *Assistant Professor – Department of Oncology and Hemato-Oncology, University of Milan , Milan (Italy) and Consultant in Hematology, Multiple Myeloma Group – Hematology unit at Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico di Milano, Milan (Italy)*

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
University of Pavia (Italy)	MD	10/2010	Medicine and Surgery
University of Pavia and Policlinico San Matteo (Italy)	Medical Research Associate	06/2012	Hematology
University of Pavia and Policlinico San Matteo (Italy)	Residency	06/2017	Hematology
University Hospital Würzburg (Germany)	Visitor Scientist	06/2017	Hematology
University Hospital Würzburg (Germany)	Research Associate	11/2019	Hematology
University of Milan and Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico (Italy)	Post-doctoral researcher	03/2022	Hematology
Umberto Veronesi Foundation	Post-doctoral researcher	10/2025	Hematology
Hematology Unit at Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico	Consultant in Hematology	Ongoing	Hematology
University of Milan and Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico (Italy)	Assistant professor and consultant in Hematology	Ongoing	Hematology

A. Personal Statement

I am a clinical hematologist at the Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico and since my Medical Degree at the University of Pavia I have been involved in high level research projects. I have a clear commitment to a successful career as a clinical researcher. Indeed, I have been simultaneously carrying out research and clinical activity for the past ten years. I co-authored more than 40 publications on peer-reviewed international scientific journals, with an H-index of 21, 2251 citations (Scopus, November 2025). I have been supervising Master and PhD students during their internships and I have been lecturing Medical students and residents. I successfully applied to different individual

fellowship programs and have been recently awarded My First AIRC Grant from the Italian Association for Cancer Research, to start developing an independent clinical research career.

B. Positions, Scientific Appointments, and Honors

Positions:

- 1/11/2025 – Present: Assistant Professor – Department of Oncology and Hemato-Oncology, University of Milan , Milan (Italy)
- 16/03/2021 – Present: Consultant in Hematology - Clinician Scientist - Multiple Myeloma Group Fondazione IRCCS Ca' Granda - Policlinico di Milano Ospedale Maggiore, Milan (Italy)
- 01/04/2022 – 31/10/2025: Umberto Veronesi Foundation Clinician Scientist Fellow Umberto Veronesi Foundation, Milan (Italy)
- 1/12/2019 – 31/3/2021: Post Doctoral Fellow at the Department of Oncology and Onco-Hematology, University of Milan
- 1/7/2017 – 30/11/2019: clinical Research Associate at the Department of Medicine II, University Hospital of Würzburg
- 1/10/2016 – 30/6/2017: Visiting clinical scientist/post-doctoral researcher at the Department of Medicine II, University Hospital of Würzburg

Awards:

- 2023-2024: Umberto Veronesi Foundation Post-Doctoral fellowship – Umberto Veronesi Foundation (two year appointment)
- 2022-2023: Umberto Veronesi Foundation Post-Doctoral fellowship – Umberto Veronesi Foundation
- 2021-2022: Umberto Veronesi Foundation Post-Doctoral fellowship – Umberto Veronesi Foundation
- 2021: ASH Abstract achievement award 2021 – American Society of Hematology
- 2020: ASH Abstract achievement award 2020 – American Society of Hematology
- 2020: UNDER40 in Hematology – UNDER40 in Hematology
- 2020: SIES best abstract award
- 2018: Lindau Nobel laureates meeting 2018 - Medicine and Physiology – Lindau Nobel Laureates annual meeting committee
- 2016: Borsa di perfezionamento – Italian Society for Experimental Hematology (SIES)
- 2015: Progetto Professionalità Ivano Becchi – Fondazione Banca del monte di Lombardia

Institutional responsibilities:

- 2026 – present: Regional head representative for the European Myeloma Network Italian working group
- 2023 – present: member of Plasma cell dyscrasia working party of the Rete Ematologica Lombarda network
- 2025 – present: Principal investigator in one phase 1 trial in Multiple Myeloma with anti-BCMA/CD38 trispecific T cell engager antibody - IRCCS Fondazione Ca' Granda Ospedale Maggiore Policlinico, Milan, Italy
- 2023-present: Principal investigator in 2 phase 1 trial in Multiple Myeloma with anti-BCMA T cell engager antibody - IRCCS Fondazione Ca' Granda Ospedale Maggiore Policlinico, Milan, Italy
- 2023-present: Principal investigator in 4 phase 3 trials in Multiple Myeloma with Elranatanab, Venetoclax and Belantamab - IRCCS Fondazione Ca' Granda Ospedale Maggiore Policlinico, Milan, Italy
- 2023-present: Member of Plasma Cell dyscrasia commission of Rete Ematologica Lombarda for IRCCS Fondazione Ca' Granda Ospedale Maggiore Policlinico
- 2020 – present: Faculty of the yearly meeting “Under 40 in Hematology – Giovani ematologi a confronto”
- Abstract and grant reviewer for International Myeloma Foundation

Memberships of scientific societies:

2023-present: SOHO Italy Scientific Board (Scientific Working Group "Multiple Myeloma" Advisor)

2023-present: Member of the HONEUR European Consortium for big data management in haematological malignancies

2016-present: Italian society for experimental Hematology (SIES)

2014-present: European society of Hematology (EHA)

2025-present: Italian society of Hematology (SIES)

2024-present: International Myeloma Society (IMS)

C. Contributions to Science

My key scientific contribution include the work I carried out to combine single cell transcriptomics and genomic sequencing to dissect the architecture of hematological disease and its evolution after drug treatments.

Under the supervision of Prof. Cazzola and Malcovati, I developed translational research projects based on NGS techniques, to define the role of SF3B1 mutations in the pathogenesis of myelodysplastic syndromes with ring sideroblasts, that was then approved as a criterion of myeloid neoplasm in the WHO/ICC classifications.

Under the supervision of Prof. Einsele at the Würzburg University Hospital (2016-2019) I: i) identified for the first time mutations in proteasome subunits, such as PSMB5, as causing MM therapy resistance; ii) described for the first time the mechanistic insights of RAS/RAF pathway dysregulation, able to drive to BRAF/MEK inhibitor therapy resistance in a central nervous system MM localization, by applying a whole exome sequencing approach; iii) identified a novel mechanism of immune escape in a patient treated with anti-BCMA CAR T cells enrolled in the phase 2 KarMMa trial, published in Nature Medicine. In 2019, I joined Prof. Bolli's group at the University of Milan, a world-wide recognized expert in the field of MM research at single cell level with a strong expertise in genomics. In this scenario, I worked in the frame of the ERC funded project "bECOMiNG" (P.I. Prof. Niccolò Bolli) to define the preclinical phases of monoclonal gammopathies and MM, by developing comprehensive integrated multi- omics approaches. Within the multi-omics technologies, I: i) explored gene expression deregulation upon genomic events in MM; ii) investigated the clonal evolutionary trajectories between MGUS and clonal hematopoiesis; iii) contributed to a deep analysis of V(D)J rearrangements in bulk-DNA and scRNA sequencing. I started developing an independent career track thanks to my early achievements and funding support provided by Fondazione Veronesi fellowship and the Global Medical Grant program supported by Pfizer. In this context, I have focused my attention on MM predictive and prognostic models to stratify MM patients and their response to drug treatment.

Recently, I have been awarded My First AIRC Individual Grant to further explore clonal aspects of the onset and resistance to treatments in MM.

My main scientific achievements relative to the research proposed are testified by the following selected papers:

- Maura F, Bergsagel PL, Ziccheddu B et al., Genomics Define Malignant Transformation in Myeloma Precursor Conditions. J Clin Oncol. 2026 Jan 20;44(3):188-199. doi: 10.1200/JCO-25-01733.
- Fattizzo B*, **Da Vià MC***, Lazzaroni F et al., Bone marrow microenvironment in autoimmune hemolytic anemia: from trephine biopsy to single cell RNA sequencing. Signal Transduct Target Ther 2025 Aug 25;10(1):277. (co-first authorship)
- Maura F, Bergsagel PL, Ziccheddu et al., Genomics Define Malignant Transformation in Myeloma Precursor Conditions. J Clin Oncol. 2025 Oct 8;JCO2501733.
- Bolli N and **Da Vià MC** For how long has this problem been there?, Blood, 145 (5): 462–463.2025
- **Da Vià MC***, Lazzaroni F*, Matera A2, et al., Genotypic identification of polyclonal plasma cells in plasma cell dyscrasias shows an aberrant single-cell phenotype with clinical implications. BioRxiv, 2024. (co-first authorship)

- Lazzaroni F, Matera A, Marella A, et al., Inference of genomic lesions from single-cell RNA-seq in myeloma improves functional intraclonal and interclonal analysis. Blood Adv 2024 Aug 13;8(15):3972-3984 (**co-last authorship**).
- **Da Vià MC**, Dietrich O, Truger M, et al., Homozygous BCMA gene deletion in response to anti-BCMA CAR T cells in a patient with multiple myeloma. Nat Med. 2021 Apr;27(4):616-619.
- **Da Vià MC**, Lionetti M, Marella A, et al., MGUS and clonal hematopoiesis show unrelated clinical and biological trajectories in an older population cohort. Blood Adv. 2022 Apr 7:bloodadvances.2021006498.
- **Ziccheddu B***, **Da Vià MC***, Lionetti M, et al.. Functional Impact of Genomic Complexity on the Transcriptome of Multiple Myeloma. Clin Cancer Res. 2021 Dec 1;27(23):6479-6490. (**co-first authorship**)
- **Da Vià MC**, Ziccheddu B, Maeda A, Bagnoli F, Perrone G, Bolli N. A journey through myeloma evolution: from the normal plasma cell to disease complexity. Hemasphere. 2020 Nov 24;4(6):e502.
- **Da Vià MC**, Solimando AG, Garitano-Trojaola A et al., CIC Mutation as a Molecular Mechanism of Acquired Resistance to Combined BRAF-MEK Inhibition in Extramedullary Multiple Myeloma with Central Nervous System Involvement. Oncologist. 2020 Feb;25(2):112-118.
- Solimando AG, **Da Vià MC**, Leone P, et al. Halting the vicious cycle within the multiple myeloma ecosystem: blocking JAM-A on bone marrow endothelial cells restores angiogenic homeostasis and suppresses tumor progression. Haematologica. 2021 Jul 1;106(7):1943-1956.
- Barrio S*, Stühmer T*, **Da-Vià M**, et al., Spectrum and functional validation of PSMB5 mutations in multiple myeloma. Leukemia. 2019 Feb;33(2):447-456.
- Malcovati L, Papaemmanuil E, Bowen DT et al., Chronic Myeloid Disorders Working Group of the International Cancer Genome Consortium and of the Associazione Italiana per la Ricerca sul Cancro Gruppo Italiano Malattie Mieloproliferative. Clinical significance of SF3B1 mutations in myelodysplastic syndromes and myelodysplastic/ myeloproliferative neoplasms. Blood. 2011 Dec 8;118(24):6239-46.

D. Additional Information: Research Support and/or Scholastic Performance

Ongoing Research funding support

- My First AIRC (Italian Society for Cancer Research Individual Grant)

1/1/2025 – 31/12/2029

The overarching aim of this project is the identification of a Multiple Myeloma (MM) precursor cell reservoir as driver of MM development and its impact at the Minimal Residual Disease (MRD) level, using advanced single cell approaches and combined functional and pharmacogenomic assays.

- Janssen Research Support Grant

1/1/2025 – 31/12/2026

This project aims to redefine the MRD based on the molecular characteristics of the disease, intercepting cells phenotypically different from clonal PCs but sharing the same clonal features. The ultimate result of this project would be to translate this investigational workflow to a clinical grade molecular analysis, to improve MM management.

- Pfizer Research Grant

(1/1/2023 – 31/12/2026)

The main aim of the project is the molecular definition of resistance mechanism onset in Multiple Myeloma relapsed/refractory patients treated with anti-BCMA immunotherapy.

Role: PI

- PRIN (Italian Ministry of Research)

(1/1/2024 – 31/12/2027)

The main aim of this project is to functionally dissect an adhesion molecule basket and to define their pathological role in Multiple Myeloma through single cell and spatial transcriptomic technologies.

Role: co-PI