

Curriculum Vitae – Irene Mattiola

Personal Data

First name	Irene
Name	Mattiola
Current position	Project leader and Research Associate, Institute for Microbiology, Infectious Diseases and Immunology (I-MIDI),
Current institution, country	Charité - Universitätsmedizin Berlin, Germany

Qualifications and Career

Stages	Period	Details
<i>Education</i>		
Bachelor in Biological Sciences	2005-2008	University of Milan-Bicocca, Milan, Italy.
Master in Biology	2008 - 2010	University of Milan-Bicocca, Milan, Italy.
<i>Career</i>		
Project leader and Research Associate	2024 - ongoing	Institute of Microbiology, Infectious Diseases and Immunology, Charité – Universitätsmedizin Berlin
Postdoctoral Researcher	2018 - 2024	Institute of Microbiology, Infectious Diseases and Immunology, Charité – Universitätsmedizin Berlin
Research Fellow	2016 - 2017	Laboratory of Development and Function of the innate immune system, Institute of Microbiology, Universitätsmedizin Mainz, Germany.
Research Fellow	2014 - 2015	Laboratory of Leukocyte Biology, University of Milan and Humanitas Clinical and Research Centre, Rozzano, Italy.
PhD student	2011 - 2014	Laboratory of Leukocyte Biology, University of Milan and Humanitas Clinical and Research Centre, Rozzano, Italy.

ACTIVITIES IN THE RESEARCH SYSTEM

Institutional Responsibilities

- 2022 - 2024 Spokesperson SIICA Mentoring Program for Postdocs
 2021 - 2024 Member of the Junior Faculty of the SIICA (Italian Association for Immunology and Allergology)
 2019 External expert reviewer BBMBiomed Doctoral Program, University of Madrid

Organisation of Scientific Meetings

- 2024 Berlin-Wide-Symposium 2024
 2022 - 2024 SIICA Virtual School of Immunology
 2023 Joint-Symposium SIICA-SYIS-yEFIS

2022 and 2023	SIICA National Congress
2022	SIICA International PhD Retreat 2022

Training courses

2024	Berlin Leadership Academy Workshop
2020 – 2022	Mentoring Program for Female Scholars at Leibniz Institutes
2021	EMBO training course for Laboratory Leadership, EMBL, Heidelberg, Germany – supported with a Fellowship awarded by the ScienceCampus DRFZ, Berlin
2020	EMBO practical course, Techniques for Mammary Gland Research, EMBL, Heidelberg, Germany

Reviewing Activities

Reviewer for the French National Research Agency (ANR).

Reviewer for *Molecular Innate Immunity* (*Frontiers Immunology publishing group*), *Cytokine Journal* and *Molecular Immunology* (*Elsevier publishing group*), *Journal of Leukocyte Biology*, *Cell Reports*.

PUBLICATIONS**Scientific Publications**

[1] G. Scarno, J. Mazej, M. Laffranchi, C. Di Censo, **I. Mattiola**, A.M. Candelotti, G. Pietropaolo, H. Stabile, C. Fionda, G. Peruzzi, S. R. Brooks, W. L. Tsai, Y. Mikami, G. Bernardini, A. Gismondi, S. Sozzani, J. P. Di Santo, C. A. J. Vosshenrich, A. Diefenbach, M. Gadina, A. Santoni, G. Sciumé, Divergent roles for STAT4 in shaping differentiation of cytotoxic ILC1 and NK cells during gut inflammation, **PNAS**. 120(40):e2306761120. doi: 10.1073/pnas.2306761120.

[2] S. Ebeling, A. Kowalkczyk, D. Perez-Vazquez, **I. Mattiola***, Regulation of tumor angiogenesis by the crosstalk between innate immunity and endothelial cells, **Front Oncol** (2023). 10:13:1171794. doi: 10.3389/fonc.2023.1171794.

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[3] **I. Mattiola***, A. Diefenbach*, Regulation of innate immune system function by the microbiome: consequences for tumor immunity and cancer immunotherapy, **Semin Immunol** (2023). 66:101724. doi: 10.1016/j.smim.2023.101724.

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[4] M.O. Jakob, D. Spari, D. Sanchez-Taltavull, L. A. Salm, B. Yilmaz, R. Doucet Ladeuze, C. Mooser, D. Pereyra, Y. Ouyang, T. Schmidt, **I. Mattiola**, P. Starlinger, D. Stroka, F. Tschan, D. Candinas, G. Gasteiger, C. S.N. Klose, A. Diefenbach, M. Gomez de Agüero, G. Beldi, ILC3 control dissemination of intestinal bacteria to ensure liver regeneration after surgery, **Cell Reports** (2023).42:112269. doi: 10.1016/j.celrep.2023.112269.

[5] R. Silva-Gomes, S.N. Mapelli, M.A. Boutet, **I. Mattiola**, M. Sironi, F. Grizzi, F. Colombo, D. Supino, S. Carnevale, F. Pasqualini, M. Stravalaci, R. Porte, A. Gianatti, C. Pitzalis, M. Locati, M.J. Oliveira, B. Bottazzi, A. Mantovani, Differential expression and regulation of MS4A family members in myeloid cells in physiological and pathological conditions, **J Leukoc Biol** 111(4) (2022) 817-836. doi:10.1002/JLB.2A0421-200R.

[6] M. Witkowski, C. Tizian, M. Ferreira-Gomes, D. Niemeyer, T.C. Jones, F. Heinrich, S. Frischbutter, S. Angermair, T. Hohnstein, **I. Mattiola**, P. Nawrath, S. McEwen, S. Zocche, E. Viviano, G.A. Heinz, M. Maurer, U. Kolsch, R.L. Chua, T. Aschman, C. Meisel, J. Radke, B. Sawitzki, J. Roehmel, K. Allers, V. Moos, T. Schneider, L. Hanitsch, M.A. Mall, C. Conrad, H. Radbruch, C.U. Duerr, J.A. Trapani, E. Marcenaro, T. Kallinich, V.M. Corman, F. Kurth, L.E. Sander, C. Drosten, S. Treskatsch, P. Durek, A. Kruglov, A. Radbruch, M.F. Mashreghi, A. Diefenbach, Untimely TGFbeta responses in COVID-19 limit antiviral functions of NK cells, **Nature** 600(7888) (2021) 295-301. doi: 10.1038/s41586-021-04142-6.

[7] **I. Mattiola***, A. Mantovani*, M. Locati*, The tetraspan MS4A family in homeostasis, immunity, and disease, **Trends Immunol** 42:764-781. doi: 10.1016/j.it.2021.07.002.

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[8] C. Di Censo, M. Marotel, **I. Mattiola**, L. Muller, G. Scarno, G. Pietropaolo, G. Peruzzi, M. Laffranchi, J. Mazej, M.S. Hasim, S. Asif, E. Russo, L. Tomaipitinha, H. Stabile, S.H. Lee, L. Vian, M. Gadina, A. Gismondi, H.Y. Shih, Y. Mikami, C. Capuano, G. Bernardini, M. Bonelli, S. Sozzani, A. Diefenbach, M. Ardolino, A. Santoni, G. Sciume, Granzyme A and CD160 expression delineates ILC1 with graded functions in the mouse liver, **Eur J Immunol** 51(11) (2021) 2568-2575. doi:10.1002/eji.202149209.

[9] **I. Mattiola***, Immune Circuits to Shape Natural Killer Cells in Cancer, **Cancers** (Basel) 13(13) (2021). 13:3225. doi: 10.3390/cancers13133225.

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[10] **I. Mattiola**, A. Diefenbach, Enabling anti-tumor immunity by unleashing ILC2, **Cell Res** 30(6) (2020) 461-462. doi: 10.1038/s41422-020-0330-9.

[11] **I. Mattiola**, A. Diefenbach, Innate lymphoid cells and cancer at border surfaces with the environment, **Semin Immunol** 41:101278. doi: 10.1016/j.smim.2019.06.001.

[12] **I. Mattiola**, F. Tomay, M. De Pizzol, R. Silva-Gomes, B. Savino, T. Gulic, A. Doni, S. Lonardi, M. Astrid Boutet, A. Nerviani, R. Carrieri, M. Molgora, M. Stravalaci, D. Morone, I.N. Shalova, Y. Lee, S.K. Biswas, G. Mantovani, M. Sironi, C. Pitzalis, W. Vermi, B. Bottazzi, A. Mantovani, M. Locati, The macrophage tetraspan MS4A4A enhances dectin-1-dependent NK cell-mediated resistance to metastasis, **Nat Immunol** 20:1012-1022. doi: 10.1038/s41590-019-0417-y.

[13] **I. Mattiola**, M. Pesant, P.F. Tentorio, M. Molgora, E. Marcenaro, E. Lugli, M. Locati, D. Mavilio, Priming of Human Resting NK Cells by Autologous M1 Macrophages via the Engagement of IL-1beta, IFN-beta, and IL-15 Pathways, **J Immunol** 195: 2818-28. doi: 10.4049/jimmunol.1500325.

Other publications

[1] "Cancer immunology makes it to clinic: how cancer will be treated in the coming years" Lugano, (Swiss), 2015. Clinical Writer for Carocci Editore, Rome.

[2] E. Timperi, F. Laudisi, M- Sambucci, M. Laffranchi, **I. Mattiola***, SIICA junior faculty: Current activities and future goals, Eur. J. Immunol., Feb 2023.

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ACADEMIC DISTINCTIONS

- 2023 OLYMPiC 2024, PI – ANR/DFG Collaboration Grant
2022 Partner – Inserm “First step” DECLYC project
2019 Best publication award – Humanitas Research Day, Rozzano (Italy)
2019 Best poster award – Leopoldina Symposium, Berlin (Germany)
2019 Innovator Under 35 Award – MIT Technology Review Italy, Bologna (Italy)
2018 EFIS (European Foundation of Immunological Societies)-IL short term fellow
2016 FIRC Fellowship for Abroad (Italian Foundation for Cancer Research)
2013 Triennial FIRC Fellowship (Italian Foundation for Cancer Research)