

PERSONAL INFORMATION

Family name, First name: **BARBARA MOLON**

Researcher unique identifier(s):

ORCID: 0000-0002-7553-2170;

Scopus Author Identifier: **6506737265**

barbara.molon@unipd.it

CURRENT POSITION

2022-present: Associate Professor, Department of Biomedical Sciences, University of Padua.

PREVIOUS POSITIONS

2019-2022: Assistant Professor (Ricercatore a tempo determinato L.230/05, Tenure Track). Department of Biomedical Sciences, University of Padua

2015-2018: Assistant Professor (Ricercatore a tempo determinato). Immunology Section Department of Biomedical Sciences, University of Padua

2012-2018: Junior Principal Investigator at the Venetian Institute of Molecular medicine, VIMM, Padua, Italy.

Supervision of graduate students and postdoctoral fellows

2022-present: supervisor of 1 PhD student (Annachiara Marin) at the Department of Biomedical Sciences, University of Padua, Italy.

2022-present: supervisor of 1 post-doctoral Fellow, (Ricardo Sanchez-Rodriguez) at the Department of Biomedical Sciences, University of Padua, Italy.

2019-2022: supervisor of 1 PhD student (Alessandra Maria Testa) at the Department of Biomedical Sciences, University of Padua, Italy.

2019-2022 supervisor of 1 PhD student (Chiara Cioccarelli) at the Department of Biomedical Sciences, University of Padua, Italy.

2015-2018: co-tutor of 2 PhD (Roberta Angioni and Elisabetta Marcuzzi) students at the Department of Biomedical Sciences, University of Padua, Italy

2011-2015: supervisor of 2 PhD students (Bianca Calì and Andrielly H.R.Agnellini) and 1 Postdoc (Andrea Predonzani) at the Department of Surgery, Oncology and Gastroenterology, Oncology and Immunology Section, University of Padua, Italy

Teaching activities

2023-present: teaching activity in Medicine and Surgery of the University of Padua, Italy (course of Clinical Pathology, 24 hours of lecture).

2021-present: teaching activity in Medicine and Surgery of the University of Padua, Italy (course of General Pathology, 40 hours of lecture).

2019-2022: teaching activity at the Specialization School in Clinical Pathology and Clinical Biochemistry of the University of Padua, Italy (course of Clinical Pathology, 30 hours of lecture).

2016-present: teaching activity in Medicine and Surgery of the University of Padua, Italy (Histopathology laboratory).

A.A.2019-2020 teaching activity in Nursing Sciences of the University of Padua, Italy (course of General Pathology, 40 hours of lecture).

A.A.2017-2018 teaching activity in Nursing Sciences of the University of Padua, Italy (course of General Pathology, 40 hours of lecture).

A.A. 2016-17: teaching activity in Nursing Sciences of the University of Padua, Italy (course of General Pathology, 40 hours of lecture).

Institutional responsibilities

2019-present: Faculty Committee, PhD school in Biomedical Sciences, University of Padova;
2019-present: Faculty Committee, school of Clinical pathology and clinical biochemistry, Medical schools, University of Padova
2012-2018: Member of the Scientific board of the Veneto Institute of Molecular Medicine;
2016-present: Faculty Committee, School of Nursing, University of Padova.

Memberships of scientific societies

2004-present: member of the Italian Society of Immunology, Clinical Immunology and Allergology (SIICA)

Selected Publications:

1. Angioni R, Bonfanti M, Caporale N, Sánchez-Rodríguez R, Munari F, Savino A, Pasqualato S, Buratto D, Pagani I, Bertoldi N, Zanon C, Ferrari P, Ricciardelli E, Putaggio C, Ghezzi S, Elli F, Rotta L, Scardua A, Weber J, Cecatiello V, Iorio F, Zonta F, Cattelan AM, Vicenzi E, Vannini A, Molon B, Villa CE, Viola A, Testa G. RAGE engagement by SARS-CoV-2 enables monocyte infection and underlies COVID-19 severity. *Cell Rep Med*. 2023 Nov 21;4(11):101266. doi: 10.1016/j.xcrm.2023.101266. Epub 2023 Nov 8..
2. 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.
3. Calì B, Deygas M, Munari F, Marcuzzi E, Cassarà A, Toffali L, Vetralla M, Bernard M, Piel M, Gagliano O, Mastrogianni M, Laudanna C, Elvassore N, **Molon B**, Vargas P, Viola A. Atypical CXCL12 signaling enhances neutrophil migration by modulating nuclear deformability. *Sci Signal*. 2022 Nov 22;15(761):eabk2552. doi: 10.1126/scisignal.abk2552. Epub 2022 Nov 22. PMID: 36413598.
4. Sánchez-Rodríguez R., Tezze C., Agnellini A., Angioni A., Venegas F., Cioccarelli C., Munari F., Bertoldi N., Canton M., Desbats M.A., Salviati L., Gissi R., Castegna A., Soriano M.E., Sandri M., Scorrano L., Viola A, **Molon B**. OPA1 drives macrophage metabolism and functional commitment via p65 signalling., *Cell Death Differ*. 2023 Mar;30(3):742-752. doi: 10.1038/s41418-022-01076-y. Epub 2022 Oct 28
5. **Molon B**, Liboni C, Viola A. CD28 and chemokine receptors: Signalling amplifiers at the immunological synapse. *Front Immunol*. 2022. Doi:10.3389/fimmu.2022.938004.
6. Orlando G, **Molon B**, Viola A, Alaibac M, Angioni R, Piaserico S. Psoriasis and Cardiovascular Diseases: An Immune-Mediated Cross Talk? *Front Immunol*. 2022 doi: 10.3389/fimmu.2022.868277.
7. Cioccarelli C, **Molon B**. MDSCs and T cells in solid tumors and non-Hodgkin lymphomas: an immunosuppressive speech. *Clin Exp Immunol*. 2022 Jun 11;208(2):147-157. doi: 10.1093/cei/uxac025.
8. Angioni R, Sasset L, Cioccarelli C, Sánchez-Rodríguez R, Bertoldi N, Putaggio CC, Viola A, Cattelan A, **Molon B**. COVID-19 Vaccination Limits Systemic Danger Signals in SARS-CoV-2 Infected Patients. *Viruses*. 2022 Mar 9;14(3):565. doi: 10.3390/v14030565.
9. Cioccarelli C, Sánchez-Rodríguez R, Angioni R, Venegas FC, Bertoldi N, Munari F, Cattelan A, **Molon B**, Viola A. IL1 β Promotes TMPRSS2 Expression and SARS-CoV-2 Cell Entry Through the p38 MAPK-GATA2 Axis. *Front Immunol*. 2021 Dec 7;12:781352. doi: 10.3389/fimmu.2021.781352.
10. Calì B, Agnellini AHR, Cioccarelli C, Sanchez-Rodriguez R, Predonzani A, Toffolo GI, Viola A, Bronte V, Arrigoni G, Zonta F, Albertoni L, Mescoli C, Marigo I, **Molon B**. GM-CSF Nitration Is a New Driver of Myeloid Suppressor Cell Activity in Tumors. *Front Immunol*. 2021 Oct 5;12:718098. doi: 10.3389/fimmu.2021.718098.
11. Angioni R, Sánchez-Rodríguez R, Munari F, Bertoldi N, Arcidiacono D, Cavinato S, Marturano D, Zaramella A, Realdon S, Cattelan A, Viola A, **Molon B***. Age-severity matched cytokine profiling reveals specific signatures in Covid-19 patients. *Cell Death Dis*. 2020 Nov 6;11(11):957. doi: 10.1038/s41419-020-03151-z.
12. Zumerle S., Calì B., Munari F., Frasson C., Di Virgilio F., **Molon B.**, Viola A. Intercellular calcium signalling induced by ATP potentiates macrophage phagocytosis. *Cell Rep*. 2019 Apr 2;27(1):1-10.e4. doi: 10.1016/j.celrep.2019.03.011
13. Marigo I, Zilio S, Desantis G., Mlecnik B., Agnellini A., Ugel S., Sasso M., Qualis J., Kratochvill F., Zanovello P., **Molon B.**, Iezzi M., Lamolinara A., Ries C., Runza V., Hoves S., Bindea G., Bindea G., Mazza E., Biciato S., Galon J., Murray PJ. And Bronte V. T cell cancer therapy requires CD40-CD40L activation of TNF α -iNOS producing dendritic cells. Volume 30, Issue 3, 12 September 2016, Pages 377-390

14. De Sanctis F, Solito S, Ugel S, **Molon B**, Bronte V, Marigo I. MDSCs in cancer: Conceiving new prognostic and therapeutic targets. *Biochim Biophys Acta* 2016 Jan;1865(1):35-48. doi: 10.1016/j.bbcan.2015.08.001
15. De Sanctis F, Sandri S, Ferrarini G, Pagliarello I, Sartoris S, Ugel S, Marigo I, **Molon B**, Bronte V. The emerging immunological role of post-translational modifications by reactive nitrogen species in cancer microenvironment. *Front Immunol.* 2014 Feb 24;5:69. doi: 10.3389/fimmu.2014.00069.
16. Sonda N, Simonato F, Peranzoni E, Cali B, Bortoluzzi S, Bisognin A, Wang E, Marincola FM, Naldini L, Gentner B, Trautwein C, Sackett SD, Zanovello P, **Molon B**, Bronte V. miR-142-3p prevents macrophage differentiation during cancer-induced myelopoiesis. *Immunity.* 2013 June 27;38(6):1236-49. doi: 10.1016/j.immuni.2013.06.004.
17. Hickman HD, Reynoso GV, Ngudiankama BF, Rubin EJ, Magadán JG, Cush SS, Gibbs J, **Molon B**, Bronte V, Bennink JR, Yewdell JW. Anatomically restricted synergistic antiviral activities of innate and adaptive immune cells in the skin. *Cell Host Microbe.* 2013 Feb 13;13(2):155-68. doi: 10.1016/j.chom.2013.01.004.
18. Viola A, Sarukhan A, Bronte V, Molon B. The pros and cons of chemokines in tumor immunology. *Trends Immunol.* 2012 Oct;33(10):496-504. doi: 10.1016/j.it.2012.05.007.
19. **Molon B***, Ugel S, Del Pozzo F, Soldani C, Zilio S, Avella D, De Palma A, Mauri P, Monegal A, Rescigno M, Savino B, Colombo P, Jonjic N, Pecanic S, Lazzarato L, Fruttero R, Gasco A, Bronte V, Viola A. Chemokine nitration prevents intratumoral infiltration of antigen-specific T cells. *J Exp Med.* 2011 Sep 26;208(10):1949-62. doi: 10.1084/jem.20101956. *Corresponding author. *Evaluated and recommended by FACULTY OF 1000*
20. Contento RL, **Molon B**, Boullaran C, Pozzan T, Manes S, Marullo S, Viola A. CXCR4-CCR5: a couple modulating T cell functions. *Proc Natl Acad Sci U S A.* 2008 Jul 22;105(29):10101-6. doi: 10.1073/pnas.0804286105.
21. Viola A, Contento RL, **Molon B**. T cells and their partners: The chemokine dating agency. *Trends Immunol.* 2006 Sep;27(9):421-7
22. **Molon B**, Gri G, Bettella M, Gómez-Moutón C, Lanzavecchia A, Martínez-A C, Mañes S, Viola A. T cell costimulation by chemokine receptors. *Nat Immunol.* 2005 May;6(5):465-71.