CURRICULUM VITAE

Name:	Veronica Marrella
Date of birth:	24/10/1978
Nationality:	Italian
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Education and trainings

2004-2009	University of Brescia, Specialization School in Biochemical Chemistry
2009,July	Specialization Diploma in Biochemical Chemistry
2005	University of Milan: Professional Examination for Biologist
2001-2003	Mario Negri Institute (Milan) Training in the Laboratory of Neuroscience
1997-2003	University of Milan, School of Biology
2003 , July	Master degree in Biological Sciences

Employment and research experience

From December 2010 to now

Permanent Researcher at CNR-IRGB.

Focus: Relationship between microbiota and immune response in disease models.

Role of immune cells in the process of cellular aging in cancer development and progression.

2006- 2009

PhD student at the Department of Human Genome and Multifactorial Disease, ITB CNR in the laboratory directed by Anna Villa.

Focus: Study of the mechanisms at the basis of autoimmune manifestations in Omenn syndrome taking advantage of the model previously characterized.

2003-2006

Fellowship at the ITB CNR in the laboratory of Human Genome directed by Anna Villa.

Focus: genetic analysis of SCID patients and characterization of a mouse model recapitulating human Omenn Syndrome

Technical skills and competences

Molecular Biology

DNA and RNA extraction (cells and tissues), RT-PCR and q PCR, Cloning, Southern and Western Blot.

Cellular Biology

Cytofluorimetry (detailed analysis of innate and adaptive immune cells in several organs, characterization of thymic epithelial cells); Magnetic beads selection; Proliferation assays. ELISA and Elispot.

In vivo

Strong experience with mice manipulation: autopsy, IP, IV and subcutaneous injections, blood collection. Induction of colitis with chemical compound.

Computer skills:

Microsoft Office, Graph Pad, Software for Citofluorimetric anlisys (FlowJo 9 and FACS DIVA), Endnote, Adobe Photoshop

Grants:

Partner in the Project funded by Ministero della salute in 2018
"The interplay between cellular aging and immune response in human colorectal liver metastasis: senescence as a new prognostic marker?

Scientific Publications:

Faggioli F, Palagano E, Di Tommaso L, Donadon M, Marrella V, Recordati C, Mantero S, Villa A, Vezzoni P, Cassani B. B lymphocytes limit senescence-driven fibrosis resolution and favor hepatocarcinogenesis in mouse liver injury. Hepatology. 2018 May;67(5):1970-1985.

Rigoni R, Fontana E, Dobbs K, Marrella V, Taverniti V, Maina V, Facoetti A, D'Amico G, Al-Herz W, Cruz-Munoz ME, Schuetz C, Gennery AR, Garabedian EK, Giliani S, Draper D, Dbaibo G, Geha RS, Meyts I, Tousseyn T, Neven B, Moshous D, Fischer A, Schulz A, Finocchi A, Kuhns DB, Fink DL, Lionakis MS, Swamydas M, Guglielmetti S, Alejo J, Myles IA, Pittaluga S, Notarangelo LD, Villa A, Cassani B. Cutaneous barrier leakage and gut inflammation drive skin disease in Omenn syndrome. J Allergy Clin Immunol. 2020;146(5):1165-1179.

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Marrella V., Poliani P.L., Notarangelo L.D. and Anna Villa "Rag Defects and Thymic Stroma: Lessons from Animal Models" Frontiers in Immunology, 2014 2;5: 259.

Maina V, Marrella V, Mantero S, Cassani B, Fontana E, Anselmo A, Del Prete A, Sozzani S, Vezzoni P, Poliani PL, Villa A. "Hypomorphic mutation in the RAG2 gene affects dendritic cell distribution and migration." Journal of Leukocyte Biology, 2013;94:1221-1230.

Lo Iacono N, Blair HC, Poliani PL, Marrella V, Ficara F, Cassani B, Facchetti F, Fontana E, Guerrini MM, Traggiai E, Francesca Schena, Marianna Paulis, Stefano Mantero, Antonio Inforzato, Serenella Valaperta, Alessandra Pangrazio, Laura Crisafulli, Virginia Maina, Paul Kostenuik, Paolo Vezzoni, Anna Villa, Cristina Sobacchi "Osteopetrosis rescue upon RANKL administration to Rankl$^{-/-}$ mice: a new therapy for human RANKL-dependent ARO", Journal of Bone Mineral Research, 2012 ;27(12):2501-10.

Marrella V, Poliani PL, Fontana E, Casati A, Maina V, Cassani B, Ficara F, Cominelli M, Schena F, Paulis M, Traggiai E, Vezzoni P, Grassi F and Villa A "Anti-CD3epsilon mAb improves thymic architecture and prevents autoimmune manifestations in a mouse model of Omenn Syndrome: therapeutic implications." Blood, 2012 120(5):1005-14.

Pangrazio A, Cassani B, Guerrini MM, Crockett JC, Marrella V, Zammataro L, Strina D, Schulz A, Schlack C, Kornak U, Mellis DJ, Duthie A, Helfrich MH, Durandy A, Moshous D, Vellodi A, Chiesa R, Veys P, Iacono NL, Vezzoni P, Fischer A, Villa A, Sobacchi C. RANK-dependent autosomal recessive osteopetrosis: characterisation of 5 new cases with novel mutations. J Bone Miner Res. 2012 27(2):342-51

Marrella V, Maina V. and Villa A "Omenn syndrome does not live by VDJ recombination alone" Current opinion in Allergy and Clinical Immunology, Curr Opin Allergy Clin Immunol. 2011; 11(6):525-531.

Cassani B, Poliani PL, Marrella V, Schena F, Sauer AV, Ravanini M, Strina D, Busse CE, Regenass S, Wardemann H, Martini A, Facchetti F, van der Burg M, Rolink AG, Vezzoni P, Grassi F, Traggiai E, Villa A. "Homeostatic expansion of autoreactive immunoglobulin-secreting cells in the Rag2 mouse model of Omenn syndrome". J Exp Med. 2010; 207(7):1525-1540.

Poliani P.L, Kisand K., Marrella V., Ravanini M., Notarangelo L.D., Villa A., Peterson P., Facchetti F. “Human peripheral lymphoid tissues contain autoimmune regulator (AIRE) expressing dendritic cells" American Journal of Pathology 2010, 176,1104-1112.

Cassani B., Poliani PL, Moratto D., Sobacchi C., Marrella V., Imperadori L., Vario D., Plebani A., Giliani S., Facchetti F., Porta F., Notarangelo L.D., Villa A., Badolato R. “Defect of regulatory T cells in patients with Omenn syndrome”. Journal of Clinical allergy and immunology 2010, 125: 209-216.

Villa A., Marrella V., Rucci F.,Notarangelo L.D. “Genetically determined lymphopenia and autoimmune manifestations”. Curr Opin Immunol. 2008, 20: 318-324

Marrella V., Poliani PL., Sobacchi C., Grassi F. and Villa A. “Of Omenn and mice”. Trends in Immunology 2008, 29: 133-140. doi: 10.1016/j.it.2007.12.001.PMID: 18255337

Marrella V., Poliani PL., Casati A., Rucci F., Frascoli L., Gougeon ML., Lemercier B., Bosticardo M., Ravanini M., Battaglia M., Roncarolo MG., Cavazzana-Calvo M., Facchetti F., Notarangelo LD., Vezzoni P., Grassi F., Villa A. “An hypomorphic R229Q Rag2 mouse mutant recapitulates human Omenn syndrome”. J Clin Invest 2007 ,117: 1260-1269.

Sobacchi C., Marrella V., Rucci F., Vezzoni P., Villa A. “RAG-dependent primary immunodeficiencies”. Hum Mutat. 2006, 27:1174-1184.

Rucci F., Cattaneo L., Marrella V., Sacco M.G., Sobacchi C., Lucchini F., Nicola S., Della Bella S., Villa ML., Imberti L., Gentili F., Montagna C., Tiveron C., Tatangelo L., Facchetti F., Vezzoni P., Villa A. ”Tissue-specific sensitivity to AID expression in transgenic mouse models”. Gene. 2006, 377: 150-158.

Rucci F., Cattaneo L., Marrella V., Sacco M.G., Sobacchi C., Lucchini F., Nicola S., Della Bella S., Villa ML., Imberti L., Gentili F., Montagna C., Tiveron C., Tatangelo L., Facchetti F., Vezzoni P., Villa A. ”Tissue-specific sensitivity to AID expression in transgenic mouse models”. Gene. 2006, 377: 150-158.

Storini C., Rossi E., Marrella V., Di Staso M., Veerhuis R., Bergamaschini L., De Simoni MG.“C1-inhibitor protects against brain ischemia-reperfusion injury via inhibition of cell recruitment and inflammation”. Neurobiol Dis. , 2005, 19:10-17.

Musio A., Marrella V., Sobacchi C., Rucci F. et al. “Damaging-agent sensitivity of Artemis-deficient cell lines”. Eur J Immunol., 2005, 35: 1250-1256.

Cavadini P., Vermi W., Facchetti F., Fontana S., Nagafuch S., Mazzolari E., Sediva A, Marrella V., Villa A., Fischer A., Notarangelo L.D., Badolato R. “AIRE deficiency in thymus of 2 patients with Omenn syndrome”. J Clin Invest., 2005, 115:728-732