

CURRICULUM VITAE

PERSONAL DATA

Name: **SIMONA MORONE**

Nationality: Italian

Date of birth: August 28, 1985

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Professional address: Lab. of Immunogenetics, Dept. of Medical Sciences
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EDUCATION

- **2014:** PhD in Complex Systems in Post-Genomic Biology. University of Torino, Italy.
Thesis: Identification of a physiological ligand of CD157: an important step towards understanding the role of CD157 in health and disease.
- **2009:** Master Degree in Medical Biotechnologies, University of Torino, Italy.
Thesis: CD157 controls peritoneal dissemination and invasion of ovarian carcinoma and predicts poor clinical outcome. Full marks with honors (110/110L, summa cum laude and dignity of print)
- **2007:** Bachelor Degree in Biotechnology, University of Torino, Italy.
Thesis: New strategies of prenatal diagnosis: analysis of fetal nucleic acids in maternal plasma. Full marks with honors (110/110L, summa cum laude with special mention)

RESEARCH EXPERIENCE

- **2014-2017:** Post-Doc Fellow, Lab of Immunogenetics, Dept. of Medical Sciences, University of Torino, Italy
- **2010-2014:** PhD student in Complex Systems in Post-Genomic Biology, University of Torino, Italy.
- **2010:** Visiting student (6 months) at Dept. of Biology, McMaster University, Hamilton, Ontario, Canada.
- **2006-2009:** Internal student, Lab of Immunogenetics, Dept. of Genetics, Biology and Biochemistry, University of Torino, Italy.

Research interruptions:

-2015 Mar-Sept: maternity leave

-2012 Mar-Sept: maternity leave

POSITIONS AND HONORS

Fellowships

- **2016-2017:** Research fellowship at University of Torino, Department of Medical Sciences, on the project “Dissecting the role of CD157 in malignant pleural mesothelioma: from prognosis to personalized therapy” founded by Investigator Grant AIRC 15968.
- **2015-2016:** winner of “Damiano per l’Ematologia” fellowship with the project “Acute myeloid leukemia, microenvironment and drug resistance: how can CD157 help us?”.
- **2013-2014:** Research fellowship at University of Torino, Department of Medical Sciences, on the project “CD157 and ovarian cancer: in vitro and in vivo models to dissect the molecular mechanisms of tumor progression” founded by Investigator Grant AIRC 11602.
- **2011-2012:** Research fellowship at University of Torino, Department of Genetics, Biology and Biochemistry, on the project “Functional analysis of the role of the CD157 molecule in the biology of ovarian cancer” founded by My First AIRC Grant 6312.
- **2010:** Research fellowship at University of Torino, Department of Genetics, Biology and Biochemistry, on the project “Functional analysis of the role of CD157 molecule in malignant pleural mesothelioma: diagnostic, prognostic and therapeutic implication” founded by Regione Piemonte.

Awards

- **2013:** July 2013 Investigator Award sponsored by SantaCruz Biotechnology
- **2014:** honor for young researcher in the field of cancer, from LILT (Lega Italiana Lotta Tumori), Asti.

Memberships

- Società Italiana Cancerologia (SIC)
- European Association for Cancer Research (EACR)

TECHNICAL SKILLS AND COMPETENCES

Cell cultures (cell lines and primary cultures); adhesion, migration and invasion assays; immunofluorescence and flow cytofluorimetric analysis; optical, fluorescence and confocal microscopy; immunohistochemistry; cell transfection and transduction; monoclonal antibodies production and purification; RNA and DNA (genomic and plasmid) extraction and purification; protein and DNA electrophoresis; Western blotting and immunoprecipitation; PCR, RT-PCR and real time PCR; RNA interference; immunoenzymatic assays (ELISA); molecular cloning techniques; lentiviral production; mouse handling, genotyping and dissection.

SCIENTIFIC ACTIVITY

Publications

1. Augeri S, Capano S, **Morone S**, Fissolo G, Giacomino A, Peola S, Drace Z, Rapa I, Novello S, Volante M, Righi L, Ferrero E, Ortolan E, Funaro A. Soluble CD157 in pleural effusions: a complementary tool for the diagnosis of malignant mesothelioma. *Oncotarget*, 2018 Apr 27 ;9(32):22785-22801.
2. Ferrero E, Lo Buono N, **Morone S**, Parrotta R, Mancini C, Brusco A, Giacomino A, Augeri S, Rosal-Vela A, García-Rodríguez S, Zubiatur M, Sancho J, Fiorio Pla A, Funaro A. Human canonical CD157/Bst1 is an alternatively spliced isoform masking a previously unidentified primate-specific exon included in a novel transcript. *Sci Rep*. 2017 Nov 21;7(1):15923.
3. Ortolan E, Giacomino A, Martinetto F, **Morone S**, Lo Buono N, Ferrero E, Scagliotti G, Novello S, Orecchia S, Ruffini E, Rapa I, Righi L, Volante M, Funaro A. CD157 enhances malignant pleural mesothelioma aggressiveness and predicts poor clinical outcome. *Oncotarget*, 2014, Aug 30; 5(15): 6191-205.
4. **Morone S**, Augeri S, Cuccioloni M, Mozzicafreddo M, Angeletti M, Lo Buono N, Giacomino A, Ortolan E, Funaro A. Binding of CD157 to fibronectin regulates cell adhesion and spreading. *J Biol Chem*. 2014, May 30; 289(22):15588-15601.
5. Lo Buono N, **Morone S**, Giacomino A, Parrotta R, Ferrero E, Malavasi F, Ortolan E, Funaro A. CD157 at the intersection between leukocyte trafficking and cancer invasion. *Front Biosci*. 2014, Jan 1;19:366-378.
6. Chaudhary R, Pierre CC, Nanan K, Wojtal D, **Morone S**, Pinelli C, Wood GM, Robine S and Daniel JM. The POZ-ZF transcription factor Kaiso (ZBTB33) induces inflammation and progenitor cell differentiation in the murine intestine. *PLoS ONE*. 2013, 8(9): e74160.
7. **Morone S.**, Lo Buono N., Giacomino A., Parrotta R., Arisio R., Katsaros D., Biglia N., Chiorino G., Rapa I., Volante M., Ortolan E. and Funaro A. Biological Role, Clinical Significance and Potential Therapeutic Applications of CD157 in Ovarian Cancer. *International Journal of Gynecological and Obstetrical Research*, 2013, 1, 28-35.
8. **Morone S**, Lo Buono N, Parrotta R, Giacomino A, Nacci G, Brusco A, Larionov A, Ostano P, Mello-Grand M, Chiorino G, Ortolan E, Funaro A. Overexpression of CD157 contributes to epithelial ovarian cancer progression by promoting mesenchymal differentiation. *PLoS One*. 2012; 7(8): e43649.
9. Lo Buono N, Parrotta R, **Morone S**, Bovino P, Nacci G, Ortolan E, Horenstein AL, Inzhutova A, Ferrero E, Funaro A. The CD157-integrin partnership controls transendothelial migration and adhesion of human monocytes. *J Biol Chem*. 2011, May 27;286(21):18681-91.
10. Ortolan E, Arisio R, **Morone S**, Bovino P, Lo Buono N, Nacci G, Parrotta R, Katsaros D, Rapa I, Migliaretti G, Ferrero E, Volante M, Funaro A. Functional role and prognostic significance of CD157 in ovarian carcinoma. *J Natl Cancer Inst*. 2010 Aug 4;102(15):1160-77.

Book Chapters

1. Lo Buono N, **Morone S**, Parrotta R, Giacomino A, Ortolan E, Funaro A. *Ectoenzymes in epithelial ovarian carcinoma: potential diagnostic markers and therapeutic targets*. In Tech–Open Access Publisher (2012) Ovarian Cancer/ Basic Sciences Perspective- ISBN 978-953-307-812-0. Rijeka, Croatia.

Conference Abstracts

1. S. Augeri, **S. Morone**, S. D’Ardia, S. Aydin, E. Ortolan and A. Funaro. Acute myeloid leukemia: CD157 under the spotlight. Brainstorming meeting on CD38 and CD157, San Benedetto Po and Mantova, Italy, Sept 21-23, 2017.
2. S. Augeri, **S. Morone**, S. D’Ardia, S. Aydin, C. Dal Secco, E. Ortolan and A. Funaro. CD157 contributes to the environment-mediated chemoresistance in acute myeloid leukemia. 2nd Special Conference EACR-AACR-SIC Florence, Italy, Jun 24-27, 2017.
3. **Morone S.**, Capano S., Giacomino A., Augeri S., Ortolan E., Rapa I., Righi L., Funaro A. CD157 as potential pleural effusion biomarker for malignant pleural mesothelioma. 2nd Special Conference EACR-AACR-SIC Florence, Italy, Jun 24-27, 2017.
4. S. Capano, A. Giacomino, **S. Morone**, E. Ortolan, I. Rapa, L. Righi, N. Lo Buono and A. Funaro. Role of CD157 in the chemoresistance of malignant pleural mesothelioma. International Conference Basic to Translational Medicine 2016: focus on Cancer. Novara, Italy Oct 6-7, 2016

5. S. Augeri, **S. Morone**, S. D'Ardia, S. Aydin, E. Ortolan and A. Funaro. Role of CD157 in the interplay between acute myeloid leukemia cells and bone marrow niche. 58th Annual Meeting of the Italian Cancer Society (SIC), Verona, Italy, Sept 5-8, 2016.
6. L Righi, I Rapa, E Duregon, **S Morone**, N. Lo Buono. Novel biomarkers in malignant pleural mesothelioma: from molecular predictors of response to therapy to novel multimodal therapeutic strategies. *Giovani Ricercatori 2011: GR-2011-02348356* Stati Generali della Ricerca Sanitaria. Roma, Italy, Apr 27-28, 2016.
7. S. Augeri, **S. Morone**, M. Cuccioloni, M. Mozzicafreddo, N. Lo Buono, S. Dardia, S. Aydin, E. Ortolan, A. Funaro. The interaction between CD157 and fibronectin modulates acute myeloid leukemia cell behavior. Special Conference EACR-AACR-SIC Florence, Italy, Jun 20-23, 2015.
8. Giacomino, M. Pirro, **S. Morone**, N. Lo Buono, S. Augeri, I. Rapa, L. Righi, M. Volante, E. Ortolan, A. Funaro. A novel biomarker for fighting malignant pleural mesothelioma. Special Conference EACR-AACR-SIC Florence, Italy, Jun 20-23, 2015.
9. Augeri S., **Morone S.**, Cuccioloni M., Mozzicafreddo M., Lo Buono N., Dardia S., Aydin S., Ortolan E. and Funaro A. The interaction between CD157 and fibronectin influences acute myeloid leukemia cell behavior and drug sensitivity. 2015 International Conference on Molecular Oncology Candiolo, Italy, Jun 6-7, 2015.
10. Giacomino A., Pirro M, Lo Buono N., **Morone S.**, Augeri S., Rapa I., Righi L., Volante M., Ortolan E. and Funaro A. A novel prognostic and predictive marker in malignant pleural mesothelioma. 2015 International Conference on Molecular Oncology” Candiolo, Italy, Jun 6-7, 2015.
11. **Morone S**, Augeri S, Cuccioloni M, Mozzicafreddo M, Angeletti M, Lo Buono N, Giacomino A, Martinetto F, Ortolan E, Funaro A. CD157-fibronectin interaction at the cross-road between inflammation and cancer progression. 56th Annual Meeting of the Italian Cancer Society (SIC)” Ferrara, Italy, September 11-13, 2014.
12. Augeri S, **Morone S**, Cuccioloni M, Mozzicafreddo M, Angeletti M, Lo Buono N, Giacomino A, Ortolan E, Funaro A. CD157/BST1 regulates cell adhesion and spreading through the interaction with the heparin-binding domains of fibronectin. FEBS-EMBO Meeting, Paris, France, August 30-September 4, 2014.
13. **Morone S**, Augeri S, Giacomino A, Parrotta R, Lo Buono N, Cuccioloni M, Ortolan E, Funaro A. CD157-extracellular matrix proteins interactions enhance integrin-mediated signaling cascade in monocytes. 15th International Congress of Immunology (ICI)” Milan, Italy, Aug 22-27, 2013; published on *Frontiers in Immunology*, 22, 2013.
14. N Lo Buono, **S Morone**, R Parrotta, A Giacomino, G Chiorino, P Ostano, E Ferrero, M Volante, A Funaro and E Ortolan. Involvement of CD157 in the Control of Ovarian Cancer Progression. 22nd Biennial Congress of the European-Association-for-Cancer-Research (EACR) Barcelona, Spain, Jul 7-10, 2012, published on *European Journal of Cancer*, 48S5, S106-S107, 2012.
15. A. Giacomino, **S. Morone**, R. Parrotta, N. Lo Buono, I. Rapa, L. Righi, M. Volante, E. Ruffini, E. Ortolan and A. Funaro. CD157 is a Novel Prognostic Marker of Malignant Pleural Mesothelioma Involved in the Control of Tumor Aggressiveness. 22nd Biennial Congress of the European-Association-for-Cancer-Research (EACR) Barcelona, Spain, Jul 7-10, 2012, published on *European Journal of Cancer*, 48S5, S107, 2012.
16. **S. Morone**, A. Giacomino, R. Parrotta, N. Lo Buono, I. Rapa, L. Righi, M. Volante, E. Ruffini, S. Demichelis, G. Rovere, S. Novello, E. Ortolan and A. Funaro. Prognostic role and biological significance of CD157 in malignant pleural mesothelioma. 53rd Annual Meeting of the Italian Cancer Society. Turin, Italy, Oct 19-22, 2011.
17. E. Ortolan, N. Lo-Buono, **S. Morone**, R. Parrotta, R. Arisio, D. Katsaros, G. Chiorino, P. Ostano, I. Rapa, E. Ferrero, M. Volante and A. Funaro. CD157 expression affects the aggressiveness of epithelial ovarian cancer. 53rd Annual Meeting of the Italian Cancer Society. Turin, Italy, Oct 19-22, 2011.
18. **S. Morone**, N. Lo Buono, R. Parrotta, R. Arisio, D. Katsaros, I. Rapa, E. Ferrero, M. Volante, E. Ortolan and A. Funaro. Biological role and clinical significance of CD157 in epithelial ovarian cancer. 17th international meeting of the European Society of Gynaecological Oncology (ESGO) Milan, Italy, Sept 11-14, 2011.
19. **Morone S**, Ortolan E, Giacomino A, Parrotta R, Lo Buono N, Rapa I, Righi L, Volante M, Ruffini E, Demichelis S, Rovere G, Novello S, Malavasi F and Funaro A. Clinical and biological significance of CD157 in malignant pleural mesothelioma. 14th World Conference on Lung Cancer. Amsterdam, the Netherlands, Jul 02-07, 2011.
20. Funaro A, Lo Buono N, **Morone S**, Parrotta R, Arisio R, Ferrero E, Katsaros D, Rapa I, Volante M and Ortolan E. Clinical and biological significance of CD157 in ovarian carcinoma. 36th FEBS Congress. Torino, Italy, June 25-30, 2011, published on *FEBS Journal*; 278 (SI); 58-59, 2011.
21. Lo Buono N, Scianna M, Bovino P, **Morone S**, Parrotta R, Ferrero E, Giverso C, Preziosi L, Malavasi F, Funaro A and Ortolan E. CD157 expression enhances invasiveness of ovarian cancer cells and induces a mesenchymal phenotype. 36th FEBS Congress Torino, Italy, Jun 25-30, 2011, published on *FEBS Journal*; 278 (SI); 218-219, 2011.

22. Parrotta R, Lo Buono N, **Morone S**, Giacomino A, Bovino P, Nacci G, Ortolan E, Ferrero E, Malavasi F and Funaro A. The CD157-integrins partnership orchestrates human monocyte adhesion and transendothelial migration. 36th FEBS Congress. Torino, Italy, Jun 25-30, 2011, published on *FEBS Journal*; 278 (SI); 303-304, 2011.
23. Lo Buono N, Bovino P, **Morone S**, Parrotta R, Ferrero E, Scianna M, Giverso C, Preziosi L, Malavasi F, Funaro A and Ortolan E. CD157 expression enhances invasiveness of ovarian cancer and induces a mesenchymal phenotype. 52nd Annual Meeting of the Italian Cancer Society, Rome, Italy, Oct 04-07, 2010.
24. Bovino P, **Morone S**, Ortolan E, Giacomini A, Lo Buono N, Rapa I, Volante M, Papotti M, Malavasi F and Funaro A. CD157 expression and prognostic significance in malignant pleural mesothelioma. 52nd Annual Meeting of the Italian Cancer Society. Rome, Italy, Oct 04-07, 2010.
25. Ortolan E, **Morone S**, Bovino P, Lo Buono N, Nacci G, Parrotta R, Arisio R, Katsaros D, Rapa I, Ferrero E, Migliaretti G, Volante M and Funaro A. CD157 is a potential target for inhibition of peritoneal dissemination and invasion and a prognostic factor in ovarian cancer patients. 52nd Annual Meeting of the Italian Cancer Society. Rome, Italy, Oct 04-07, 2010.
26. Parrotta R, Lo Buono N, **Morone S**, Bovino P, Nacci G, Ortolan E, Horenstein AL, Ferrero E, Malavasi F and Funaro A. CD157 and integrins: a dynamic duet orchestrating monocyte migration. Keystone Symposia Meeting Innate Immunity: Mechanisms Linking with Adaptive Immunity. Dublin, Ireland, Jun 07-12, 2010.
27. Ortolan E., **Morone S.**, Bovino P., Lo Buono N., Parrotta R., Volante M., Katsaros D., Arisio R., Malavasi F. and Funaro A. Functional role and prognostic significance of CD157 in ovarian carcinoma. 51st Annual Meeting of the Italian Cancer Society. Sesto San Giovanni, Milano, Italy, Nov 23-26, 2009.
28. Parrotta R., Lo Buono N., **Morone S.**, El Baroudi M., Ortolan E, Malavasi F. and Funaro A. Functional role of CD157 in monocyte migration. 42nd Annual Meeting of the Society for Leukocyte Biology. Lisbon, Portugal, Oct 17-21, 2009. published on *Cytokine*, 1-2, A174, 48:130, 2009.
29. Bovino P., Ortolan E., **Morone S.**, Lo Buono N., Parrotta R, El Baroudi M., Rapa I., Volante M., Ferrero E., Katsaros D., Arisio R., Malavasi F. and Funaro A. CD157 controls peritoneal dissemination and invasion of ovarian carcinoma and is a molecular predictor of poor clinical outcome. 16th International Meeting of the European Society of Gynecological Oncology (ESGO). Belgrade, Serbia, Oct 11-15, 2009.
30. Lo Buono N., Parrotta R., Bovino P., **Morone S.**, Ortolan E., Malavasi F. and Funaro A. Receptor activities of human CD157 in myeloid cells rely on the MAP-kinase signaling cascade. 41st Annual Meeting of the Society for Leukocyte Biology. Denver, CO, Nov 06-08, 2008, published on *Journal of Leukocyte Biology* A109, S2008.