

## Samantha Solito

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Date /Place of birth: 04/02/1982 Taranto, Italy

### WORK EXPERIENCE

05/09/2018–Present: Manager of Centro Piattaforme Tecnologiche. University of Verona, Verona (Italy).  
<https://www.linkedin.com/company/cptunivr/>; <https://cpt.univr.it/>.

29/01/2018–Present: Responsible of Flow Cytometry and Cellular Analysis Platform. Centro Piattaforme Tecnologiche. University of Verona, Verona (Italy)

01/01/2010–28/01/2018: Post PhD senior scientist, in the laboratory of human cancer immunology. fellowship from University of Padova, Pezcoller Foundation, AIRC. University of Padova, Padova (Italy)

01/01/2007–31/12/2009: PhD in Oncology and Surgical Oncology, in the laboratory of human cancer immunology headed by Prof. S. Mandruzzato and Prof. P. Zanovello. University of Padova, Padova (Italy)

01/04/2006–31/12/2006: postgraduate fellowships (Telethon) in the laboratory of Prof. Bonaldo. University of Padova, Padova (Italy)

01/03/2005–31/03/2006: traineeship in the laboratory of Prof. Bonaldo (Departments of Histology, Microbiology & Medical Biotechnologies). University of Padova, Padova (Italy)

### EDUCATION AND TRAINING

30/03/2010: PhD in Oncology and Surgical Oncology. University of Padova, Padova (Italy)

28/03/2006: Master Degree in Medical Biotechnology (five years), with first class honours (110/110 e lode) at the University of Padova.

1/07/2000: Degree in classical secondary school (five years) with 99/100 at the Liceo Classico Quinto Ennio, Taranto, Italy.

PERSONAL SKILLS: Mother tongue(s): Italian; Other language(s): English (B2)

SOFT SKILLS: collaboration, leadership, problem-solving, critical thinking, time management, ability to work under pressure

### JOB-RELATED SKILLS:

- Cellular techniques: cell isolation protocols from human samples (peripheral blood and solid tissue), multistaining with mAb for FACS analysis, immunological assays (ELISA, mixed lymphocyte reactions, ELISPOT).
- Flow cytometry studies: flow cytometry experimental setup of multistaining labelling with LSRII and Fortezza X-20 (BD) to evaluate: Cytotoxic effect of antineoplastic drugs on different cell subsets, Cell proliferation (PKH, CFSE, KI67), Phenotype characterization of lymphocytic or myeloid subsets in tumor infiltrate or peripheral blood of cancer patients, Intracitoplasmatic or intranuclear detection of proteins, Diagnostic evaluation of peripheral blood lymphocytes subsets.
- Flow Cytometry software: Facsdiva, FlowJow, Summit, ModFit.
- Cell sorting with MoFlo Astrios (Beckman Coulter) and BD FACSAria Fusion (BD): sorting of different populations from enrichment of transfected cells to separation of different cell subsets with different sorting mask (yeld, single cell, purity) and different nozzle. Sorting of droplets, nanoparticles and vegetal cells. Course on MoFlo Astrios at Core Facility of Flow Cytometry at Faculty of Medicine, University of Geneva and at San Raffaele.
- Molecular and biochemical techniques: DNA and RNA extraction and purification. Reverse trascription PCR and Real Time PCR, PCR, Southern blot, Western blot, Agilent, amplification and hybridization with Affymetrix arrays for genes and miRNA.
- Manuscript preparation, revision, statistical analysis (software; SigmaPlot, CorelDraw, Endnote).

### ADDITIONAL INFORMATION

- Scientific meeting participation: about 20 oral presentation at national and international Immunology and oncology conferences

- Chairmen: Tumor Immunology session and microenvironment (Congresso nazionale SIC 2012)
- Lesson “La core facility di citometria: focus sul sorting cellulare” during the course about flow cytometry organised by Miltenyi Biotec ( 15-5-2019)

## PUBLICATIONS

1. IL4R $\alpha$ + myeloid-derived suppressor cell expansion in cancer patients.

Mandrizzato S, Solito S, Falisi E, Francescato S, Chiarion-Sileni V, Mocellin S, Zanon A, Rossi CR, Nitti D, Bronte V, Zanovello P. *J Immunol*. 2009 May 15;182(10):6562-8.

2. Tumor-induced tolerance and immune suppression depend on the C/EBP $\beta$  transcription factor.

Marigo I, Bosio E, Solito S, Mesa C, Fernandez A, Dolcetti L, Ugel S, Sonda N, Biccato S, Falisi E, Calabrese F, Basso G, Zanovello P, Cozzi E, Mandrizzato S, Bronte V. *Immunity*. 2010 Jun 25;32(6):790-802. Epub 2010 Jun 3

3. A human promyelocytic-like population is responsible for the immune suppression mediated by myeloid-derived suppressor cells.

Solito S, Falisi E, Diaz-Montero CM, Doni A, Pinton L, Rosato A, Francescato S, Basso G, Zanovello P, Onicescu G, Garrett-Mayer E, Montero AJ, Bronte V, Mandrizzato S. *Blood*. 2011 Jul 6

4. Antigen specificity of immune suppression by myeloid-derived suppressor cells.

Solito S, Bronte V, Mandrizzato S. *J Leukoc Biol*. 2011 Jul;90(1):31-6. Epub 2011 Apr 12

5. Myeloid cell diversification and complexity: an old concept with new turns in oncology.

Chioda M, Peranzoni E, Desantis G, Papalini F, Falisi E, Solito S, Mandrizzato S, Bronte V. *Cancer Metastasis Rev*. 2011 Mar;30(1):27-43

6. Highlights on molecular mechanisms of MDSC-mediated immune suppression: paving the way for new working hypotheses.

Solito S, Pinton L, Damuzzo V, Mandrizzato S. *Immunological Investigation* 2012, 41(6-7):722-37

7. Myeloid-derived suppressor cell heterogeneity in human cancers. Solito S, Marigo I, Pinton L, Damuzzo V, Mandrizzato S, Bronte V. *Ann N Y Acad Sci*. 2014 Jun;1319:47-65. Review.

8. Complexity and challenges in defining myeloid-derived suppressor cells.

Damuzzo V, Pinton L, Desantis G, Solito S, Marigo I, Bronte V, Mandrizzato S. *Cytometry B Clin Cytom*. 2014 Nov 26.

9. MDSCs in cancer: Conceiving new prognostic and therapeutic targets.

De Sanctis F, Solito S, Ugel S, Molon B, Bronte V, Marigo I. *Biochim Biophys Acta*. 2016 Jan;1865(1):35-48.

10. Activated T cells sustain myeloid-derived suppressor cell-mediated immune suppression.

Pinton L,\* Solito S,\* Damuzzo V, Francescato S, Pozzuoli A, Berizzi A, Mocellin S, Rossi CR, Bronte V, Mandrizzato S. *Oncotarget*. 2015 Dec 18.

11. Low dose gemcitabine-loaded lipid nanocapsules target monocytic myeloid-derived suppressor cells and potentiate cancer immunotherapy.

Sasso MS, Lollo G, Pitorre M, Solito S, Pinton L, Valpione S, Bastiat G, Mandrizzato S, Bronte V, Marigo I, Benoit JP. *Biomaterials*. 2016 Jul

12. Clinical implication of tumor-associated and immunological parameters in melanoma patients treated with ipilimumab.

Damuzzo V, Solito S, Pinton L., Carrozzo E, Valpione S, Pigozzo J, Arboretti Giancristofaro R, Chiarion-Sileni V, Mandrizzato S. *Onc Immunology* 2016.

13. In Brief: Myeloid-derived suppressor cells in cancer.

Solito S, Pinton L., Mandrizzato S. *The Journal of Pathology* 2017

14. Fiore A, Ugel S, De Sanctis F, Sandri S, Fracasso G, Trovato R, Sartoris S, Solito S, Mandruzzato S, Vascotto F, Hippen KL, Mondanelli G, Grohmann U, Piro G, Carbone C, Melisi D, Lawlor RT, Scarpa A, Lamolinara A, Iezzi M, Fassan M, Biciato S, Blazar BR, Sahin U, Murray PJ, Bronte V. Induction of immunosuppressive functions and NF- $\kappa$ B by FLIP in monocytes. *Nat Commun.* 2018
15. Solito S, Pinton L, De Sanctis F, Ugel S, Bronte V, Mandruzzato S, Marigo I. Methods to Measure MDSC Immune Suppressive Activity In Vitro and In Vivo. *Curr Protoc Immunol.* 2019 Feb;124(1):e61. doi: 10.1002/cpim.61. Epub 2018 Oct 10. PMID: 30303619.
16. Pinton L, Solito S, Masetto E, Vettore M, Canè S, Puppa AD, Mandruzzato S. Immunosuppressive activity of tumor-infiltrating myeloid cells in patients with meningioma. *Oncoimmunology.* 2018
17. Pinton L, Masetto E, Vettore M, Solito S, Magri S, D'Andolfi M, Del Bianco P, Lollo G, Benoit JP, Okada H, Diaz A, Della Puppa A, Mandruzzato S. The immune suppressive microenvironment of human gliomas depends on the accumulation of bone marrow-derived macrophages in the center of the lesion. *J Immunother Cancer.* 2019
18. Magri S, Masetto E, Solito S, Francescato S, Belluzzi E, Pozzuoli A, Berizzi A, Ruggieri P, Mandruzzato S. Correction to: Human MDSCs derived from the bone marrow maintain their functional ability but have a reduced frequency of induction in the elderly compared to pediatric donors. *Immun Ageing.* 2020
19. Dai Prè E, Busato A, Mannucci S, Vurro F, De Francesco F, Riccio V, Solito S, Biswas R, Bernardi P, Riccio M, Sbarbati A. In Vitro Characterization of Adipose Stem Cells Non-Enzymatically Extracted from the Thigh and Abdomen. *Int J Mol Sci.* 2020

#### HONOURS AND AWARDS

- Premio Mario e Lina Austoni 2012 (Università di Padova).
- Premio Ferruccio ed Elena Bernardi 2012 (Pezcoller Foundation).
- Premio Cecilia Cioffrese 2012 (Fondazione Carlo Erba).
- Finanziamento Progetto Giovani Studiosi 2013 (Università di Padova).

Autorizzo al trattamento dei dati personali ai sensi del D. Lgs. 196/2003

DATA 25-03-21

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