

## PERSONAL INFORMATION

**Antonella Viola**

 Via Dignano, 25, 35129 Padua, Italy

 +39 349 1484946

 antonella.viola@unipd.it

Sex Female | Date of birth 03/05/1969 | Nationality Italian

## WORK EXPERIENCE

01/09/2017–Present

**Scientific Director**

Pediatric Research Institute (IRP), Padua, Italy

2015–09/2017

**Deputy Director**

Venetian Institute of Molecular Medicine (VIMM), Padua, Italy

11/2015–Present

**Full Professor of Pathology**

University of Padua - Department of Biomedical Sciences, Padua, Italy

2014–Present

**Faculty, PhD program in Biomedical Sciences**

University of Padua - Department of Biomedical Sciences, Padua, Italy

11/2014–10/2015

**Associate Professor of Pathology**

University of Padua - Department of Biomedical Sciences, Padua, Italy

2007–10/2014

**Assistant Professor of Pathology**

Faculty of Medicine - University of Milan, Milan, Italy

2006–2014

**Group Leader**

Istituto Clinico Humanitas, Rozzano, Milan, Italy

2002–2007

**Assistant Professor of Pathology**

Faculty of Medicine - University of Padua, Padua, Italy

2001–2017

**Group Leader**

Venetian Institute of Molecular Medicine (VIMM), Padua, Italy

06/1999–12/2000

**EMBO fellow**

EMBL Monterotondo, Monterotondo, Italy

03/1995–05/1999

**Scientific Member of the Basel Institute for Immunology**

Basel Institute for Immunology, Basel, Switzerland

1991–1995

**PhD student**

Department of Biology - University of Padua, Padua, Italy

## EDUCATION AND TRAINING

1986–1991

**Biological Science degree**

University of Padua, Padua, Italy

1991–1995 **Ph.D in Evolutionary Biology**  
University of Padua, Padua, Italy

## PERSONAL SKILLS

Mother tongue(s) Italian

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user  
Common European Framework of Reference for Languages

## ADDITIONAL INFORMATION

Conferences

Among many others:

### Seminars

The CBR Institute for Biomedical Research, Harvard Medical School, Boston, MA, USA;  
The Kimmel Cancer Center of Thomas Jefferson University, Philadelphia, PA, USA;  
Centro Nacional de Biotecnología/CSIC, Madrid, Spain;  
Institut Pasteur, Paris, France;  
Imperial College, London, UK;  
Weatherall Institute of Molecular Medicine, University of Oxford, Oxford, UK;  
Medical Research Council, Cambridge, UK;  
Skirball Institute of Biomolecular Medicine, New York University School of Medicine, New York, NY, USA;  
Department of Microbiology & Immunology, University of California, San Francisco, CA, USA;  
La Jolla Institute of Allergy and Immunology, La Jolla, CA, USA.

### Meetings

Keystone Conference A4-2006: Chemokines and Chemokine Receptors;  
Keystone Conference D2-2006: Lipid Rafts and Cell Function;  
Gordon Research Conference 2006: Chemotactic Cytokines;  
35th Annual Autumn Immunology Conference, Chicago, IL, USA;  
The 10th Membrane Research Forum, Kyoto, Japan;  
94th Annual Meeting of the American Association of Immunologists, Miami, FL, USA;  
Keystone Conference J3-2008: Chemokines and Chemokine Receptors.  
Gordon Research Conference 2008: Chemotactic Cytokines;  
European Congress of Immunology, ECI 2009 Berlin;  
5th International Leukocyte Signal Transduction Workshop, 2009 Crete;  
Gordon research Conference 2010: Chemotactic Cytokines;  
European Association for Cancer Research meeting EACR21, 2010 Oslo;  
ESH-EHA, Anti - Inflammatory & Immune Modulatory 2 Properties of MSCs, Cannes, 2012;  
"Immunodeficiency and beyond", Freiburg Symposium, 2012;  
MedUni School of Immunology, Vienna, 2013;  
Physics of Life meeting 2015, Cambridge;  
EFIS School of Immunology, Becici 2015;  
World Oncology Forum – European School of Oncology, Milan 2015;  
Symposium "T lymphocyte activation", Porto 2017;  
51th ESCII conference, Genoa 2017;  
13th EFIS-EJI Tatra Immunology Conference, 2018;  
17th International Congress of Immunology (17th ICI, IUIS2019, Beijing.

Honours and awards

1997: Roche Prize for Immunology

2005: Cancer Research Institute Investigator Award, USA.  
2006: EMBO Young Investigator  
2008: Prize “Donne Eccellenti” Marisa Belisario Foundation, Veneto, Italy.  
2008: Prize “Chiara D’Onofrio”  
2013: ERC Advanced Investigator Grant  
2016: EMBO member  
2017: Prize “Nilde Iotti”  
2017: Cicap honorary member

#### Projects

Among many others:

US Army Medical Research and Materiel Command, USA 2003: Human Prostate Cancer Infiltrating Lymphocytes (PI);  
Associazione Italiana Ricerca sul Cancro (AIRC), Italy 2003, 2004, 2005, 2008 - New strategies in cancer immunotherapy (PI);  
Cancer Research Institute of New York, USA 2005: Boosting anti-tumor responses of T lymphocytes infiltrating human prostate cancer (PI);  
US Army Medical Research and Materiel Command, USA 2006: Defining novel molecules to rescue immunity against prostate cancer (PI);  
Ministry of Education (PRIN), Italy 2007, 2009 – Immune system against cancer (PI);  
Ministry of Health, Italy 2007, 2008, 2009: Tumor microenvironment (PI);  
Telethon, Italy 2007 - Understanding the WHIM Syndrome (PI);  
E-Rare Programme, EC 2008: Understanding the WHIM syndrome (Coordinator);  
FP7-Health, EC 2008: Systems Biology of T-cell activation in health and disease (Partner);  
Association for International Cancer Research (AICR), UK 2009: Chemokine nitration in the prostate cancer microenvironment (PI);  
Telethon, Italy 2010 - The WHIM syndrome (Coordinator);  
Ministry of Health « Giovani Ricercatori » Italy, 2011 : Mesenchymal Stem Cells (Coordinator);  
ERC Advanced Investigator Grant, EC 2013: Signaling compartmentalization and vesicle trafficking at the phagocytic synapses (PI);  
FP7-Health, EC 2013: Mesenchymal Stem Cells to Reduce Liver Inflammation (Work Package Leader);  
CARIPARO Foundation, Italy 2015: Novel strategies to counteract obesity: immune signaling and mitochondria shape (PI);  
ERC Proof-of-Concept, EC 2019: Monoamine oxidase B inhibitors as novel drugs targeting NLRP3 inflammasome (PI);  
Città della Speranza & Human Technopole Foundations, Italy 2020: COVIDIamo: tracing the dynamics of COVID19 at single-cell multi-omic resolution for drug repurposing and biomarker identification (PI);  
CARIPARO Foundation, Italy 2020: I recettori di SARS-CoV2: modulazione della loro espressione attraverso ormoni e infiammazione (PI).

#### Panels

2009 - 2011: AIRC Scientific Committee  
2006 – 2015: FP7 Expert Evaluator  
2014 - 2019: ERC Grants Evaluator  
2016 - present: Scientific Council of the Department of Biomedical Sciences, CNR Italy  
2017 - present: CORIS Technical Committee  
2019: Croatian Agency for Science and Higher Education  
2019 - present: Member of Comitato Scientifico di Osservatorio Terapie Avanzate  
2019 -2020: Academy of Finland

#### Publications

(H-index 45, total citations 10037; google scholar)

1. V. Albergoni & **A. Viola**. 1995. Effects of cadmium on catfish, *Ictalurus melas*, humoral immune responses. *Fish & Shellfish Immunology*, 6: 167.
2. V. Albergoni & **A. Viola**. 1995. Effects of cadmium on lymphocyte proliferation and macrophage activation in catfish, *Ictalurus melas*. *Fish & Shellfish Immunology*, 5: 301.
3. **A. Viola**, G. Pregnolato & V. Albergoni. 1996. Effect of cadmium on catfish, *Ictalurus melas*, natural killer cells. *Fish & Shellfish Immunology*, 6: 167.
4. **A. Viola** & A. Lanzavecchia. 1996. T cell activation determined by T cell receptor number and tunable thresholds. *Science*, 273: 104-6.
5. **A. Viola**, S. Linkert & A. Lanzavecchia. 1997. A T cell receptor (TCR) antagonist competitively inhibits serial TCR triggering by low-affinity ligands, but does not affect triggering by high-affinity anti-

- CD3 antibodies. *European Journal of Immunology*, 27: 3080.
6. **A. Viola**, M. Salio, L. Tuosto, S. Linkert, O. Acuto & A. Lanzavecchia. 1997. Quantitative contribution of CD4 and CD8 to T cell antigen receptor serial triggering. *The Journal of Experimental Medicine*, 186: 1775.
  7. **A. Viola**, G. Iezzi & A. Lanzavecchia. 1998. The role of dendritic cells in T cell priming: the importance of being professional. In "Dendritic Cells: Biology and Clinical Applications", 1998, Academic Press.
  8. A. Lanzavecchia, G. Iezzi & **A. Viola**. 1999. From TCR engagement to T cell activation: a kinetic view of T cell behaviour. *Cell*, 96:1.
  9. M. F. Bachmann, M. Barner, **A. Viola** & M. Kopf. 1999. Differential regulation of cytokine production and cytolysis in effector and memory T cells after viral infection. *European Journal of Immunology*, 29: 291.
  10. **A. Viola**, S. Schroeder, Y. Sakakibara & A. Lanzavecchia. 1999. T lymphocyte costimulation mediated by reorganization of membrane microdomains. *Science*, 283: 680-2.
  11. M. F. Bachmann, A. Gallimore, S. Linkert, V. Cerundolo, A. Lanzavecchia, M. Kopf & **A. Viola**. 1999. Developmental regulation of Lck-targeting to the CD8 coreceptor controls signaling in naive and memory T cells. *The Journal of Experimental Medicine*, 189: 1521-9.
  12. **A. Viola** & A. Lanzavecchia. 1999. T cell activation and the dynamic world of rafts. *Acta Pathologica, Microbiologica et Immunologica Scandinavica*, 107:615.
  13. L. Tuosto, I. Parolini, S. Schroeder, M. Sargiacomo, A. Lanzavecchia & **A. Viola**. 2001. Organization of plasma membrane functional rafts upon T cell activation. *European Journal of Immunology*, 31:345-9.
  14. **A. Viola**. 2001. Amplification of TCR signaling by membrane dynamic microdomains. *Trends in Immunology*, 22:322-7.
  15. **A. Viola**. 2001. Antigen recognition by T cell: a strong sense of structure. *Trends in Immunology*, 22:601.
  16. B. Marinari, A. Costanzo, **A. Viola**, F. Michel, G. Mangino, O. Acuto, M. Levrero, E. Piccolella & Loretta Tuosto. 2001. Vav cooperates with CD28 to induce NF- $\kappa$ B activation via a pathway involving Rac-1 and mitogen-activated kinase kinase 1. *European Journal of Immunology*, 32: 447-56.
  17. P. Pizzo, E. Giurisato, M. Tassi, A. Benedetti, T. Pozzan, and **A. Viola**. 2002 Lipid rafts and TCR signalling: a critical reevaluation. *European Journal of Immunology*, 32:3082-91.
  18. P. Pizzo and **A. Viola**. 2003 Lymphocyte lipid rafts: structure and functions. *Current Opinion in Immunology*, 15:255-60.
  19. P. Pizzo, E. Giurisato, A. Bigsten, M. Tassi, R. Tavano, A. Shaw and **A. Viola**. 2004. Physiological T cell activation starts and propagates in lipid rafts. *Immunology Letters*, 91:3-9.
  20. R. Zambello, A. Cabrelle, L. Trentin, C. Agostini, G. Semenzato and **A. Viola**. 2004. The raft marker GM1 distinguishes functional subsets of Granular Lymphocytes in patients with CD3+ Lymphoproliferative Disease of Granular Lymphocytes. *Leukemia*, 18:771-6.
  21. P. Pizzo and **A. Viola**. 2004. Lipid rafts in lymphocyte activation. *Microbes and Infection*, 6:682-92.
  22. G. Gri, B. Molon, S. Manes, T. Pozzan and **A. Viola**. 2004. The inner side of T cell lipid rafts. *Immunology Letters*, 94:247-252.
  23. R. Tavano, G. Gri, B. Molon, B. Marinari, C.E. Rudd, L. Tuosto and **A. Viola**. 2004. CD28 and lipid rafts coordinate recruitment of Lck to the immunological synapse of human T lymphocytes". *The Journal of Immunology*, 173:5392-5397.
  24. P. Pizzo and **A. Viola**. Lipid-based membrane microdomains in T cell activation. 2005. *Current Immunology Review*, 1:7-12.
  25. V. Bronte, T. Kasic, G. Gri, K. Gallana, G. Borsellino, I. Marigo, L. Battistini, M. Iafrate, T. Prayer-Galetti, F. Pagano and **A. Viola**. 2005. Boosting anti-tumor responses of T lymphocytes infiltrating human prostate cancers. *The Journal of Experimental Medicine*, 201:1257-68.
  26. B. Molon, G. Gri, M. Bettella, C. Goumez-Mouton, A. Lanzavecchia, C. Martinez-A, S. Manes and **A. Viola**. 2005. T cell costimulation by chemokine receptors. *Nature Immunology*, 6:465-71.
  27. T. Kasic and **A. Viola**. 2005. Prostate cancer-induced immunodysfunction: a lesson from organ cultures. *Immunology Letters*, 15:98-102.
  28. S. Manes and **A. Viola**. 2005. Lipid rafts in lymphocyte activation and migration. *Molecular Membrane Biology*, 23:59-69.
  29. **A. Viola**, R. Contento and B. Molon. 2006. T cells and their partners: the chemokine dating agency. *Trends in Immunology*, 27:421-427.
  30. R. Tavano, R.L. Contento, S.J. Baranda, M. Soligo, L. Tuosto, S. Manes and **A. Viola**. 2006. CD28 interaction with filamin-A controls lipid raft accumulation at the T cell immunological synapse. *Nature Cell Biology*, 8:1270-1276.
  31. S. Mayor, **A. Viola**, R.V. Stan and M.A. del Pozo. 2006. Flying kites on slippery slopes at

Keystone. *EMBO Reports*, 7:1089-1093.

32. S. Campello, R.A. Lacalle, M. Bettella, S. Manes, L. Scorrano and **A. Viola**. 2006. Orchestration of leukocyte chemotaxis by mitochondrial dynamics. *The Journal of Experimental Medicine*, 203: 2879-2886.
33. C. Mazzone and **A. Viola**. 2007. From Tango to Quadrilla: current views on the immunological synapse. *Cell Adhesion and Migration*, 1:7-12.
34. **A. Viola** and V. Bronte. 2007. Metabolic mechanisms of cancer-induced inhibition of immune responses. *Seminars in Cancer Biology*, 17:309-316.
35. S. Jimenez-Baranda, C. Gomez-Mouton, A. Rojas, L. Martinez-Prats, E. Mira, R.A. Lacalle, A. Valencia, D. S. Dimitrov, **A. Viola**, R. Delgado, C. Martinez-A, S. Manes. 2007. Filamin-A regulates actin-dependent clustering of HIV receptors. *Nature Cell Biology*, 9:838-46.
36. C. Mazzone, B. Baldani-Guerra, P. Cecchini, T. Kasic, **A. Viola**, M. de Bernard, B. Aricò, F. Gerosa and E. Papini. 2007. IFN- $\gamma$  and R-848 dependent activation of human monocyte-derived dendritic cells by *Neisseria meningitidis* adhesin A. *The Journal of Immunology*, 179: 3904-16.
37. **A. Viola** and N. Gupta. 2007. Tether and Trap: Regulation of membrane rafts by actin-binding proteins. *Nature Reviews Immunology*, 7:889-96.
38. **A. Viola** and A.D. Luster. 2008. Chemokines and Their Receptors: Drug Targets in Immunity and Inflammation. *Annual Review of Pharmacology and Toxicology*, 48:171-197.
39. **A. Viola**, B. Molon and R.L. Contento. 2008. Chemokines: coded messages for T cell missions. *Frontiers in Biosciences*, 13:6341-53.
40. R.L. Contento, B. Molon, C. Boularan, T. Pozzan, S. Manes, S. Marullo and **A. Viola**. 2008. CXCR4-CCR5: a couple modulating T-cell functions. *Proceedings of the National Academy of Science of the United States of America*, 105:10101-10106.
41. G. Gri, S. Piconese, B. Frossi, V. Manfredi, S. Merluzzi, C. Tripodo, **A. Viola**, S. Odom, J. Rivera, M.P. Colombo and C.E. Pucillo. 2008. CD4+CD25+ regulatory T cells suppress mast cell degranulation and allergic responses through OX40-OX40L interaction. *Immunity*, 29:771-781.
42. **A. Viola**, R.L. Contento and B. Molon. 2010. Signaling amplification at the immunological synapse. *Current Topics in Microbiology and Immunology*, 340:109-22.
43. V. Dal Secco, C. Soldani, C. Debrat, F. Asperti-Boursin, E. Donnadieu, **A. Viola\*** and A. Sarukhan. 2009. Tunable chemokine production by antigen presenting dendritic cells in response to changes in regulatory T cell frequency in mouse reactive lymph nodes. *PLoSone*, 4:e7696. \*corresponding author.
44. Rajendran L, Beckmann J, Magenau A, Boneberg EM, Gaus K, **Viola A**, Giebel B, Illges H. 2009. Flotillins are involved in the polarization of primitive and mature hematopoietic cells. *PLoS One* 2009 Dec 22 4 e8290.
45. S. Sivori, M. Falco, S. Carlomagno, E. Romeo, C. Soldani, A. Bensussan, **A. Viola**, L. Moretta and A. Moretta. 2010. A novel KIR-associated function: evidence that CpG DNA uptake and shuttling to early endosomes is mediated by KIR3DL2. *Blood*, 116(10):1637-47.
46. K. Nika, C. Soldani, M. Salek, W. Paster, A. Gray, R. Etzensperger, L. Fugger, P. Polzella, V. Cerundolo, O. Dushek, T. Hoefer, **A. Viola** and O. Acuto. 2010. Constitutively active Lck in T cell drives antigen receptor signal transduction. *Immunity*, 32:766-777.
47. R.L. Contento, S. Campello, A.E. Trovato, E. Magrini, F. Anselmi and **A. Viola**. 2010. Adhesion shapes T cells for prompt and sustained T cell receptor signaling. *EMBO Journal*, 29:4035-47.
48. L. Koval, O. Lykhmus, M. Zhmak, A. Khrushov, V. Tsetlin, E. Magrini, **A. Viola**, A. Chernyavsky, J. Qian, S. Grando, S. Komisarenko and M. Skok. 2010. Differential involvement of  $\alpha 4\beta 2$ ,  $\alpha 7$  and  $\alpha 9\alpha 10$  – nicotinic acetylcholine receptors in B lymphocyte activation in vitro. *International Journal of Biochemistry and Cell Biology*, 43 (2011) 516–524.
49. T. Kasic, P. Colombo, C. Soldani, C.M. Wang, E. Miranda, M. Roncalli, V. Bronte and **A. Viola**. 2011. Modulation of human T cell functions by reactive nitrogen species. *European Journal of Immunology*, 41(7):1843-9.
50. S. Morlacchi, V. dal Secco, C. Soldani, N. Glaichenhaus, **A. Viola** and A. Sarukhan. 2011. Regulatory T cells target chemokine secretion by dendritic cells independently of their capacity to regulate T cell proliferation. *The Journal of Immunology*, 186(12):6807-14.
51. C. Mazzone, A. Anselmo, J. Cibella, C. Soldani, A. Destro, N. Kim, M. Roncalli, S.J. Burden, M.L. Dustin, A. Sarukhan and **A. Viola**. 2011. The critical role of agrin in the hematopoietic stem cell niche. *Blood*, 118(10): 2733-2742.
52. S. Morlacchi, C. Soldani, **A. Viola** and A. Sarukhan. 2011. Self-antigen presentation by B cells results in regulatory T cell induction rather than anergy or clonal deletion. *Blood*, 118(4):984-91.
53. E. Magrini, I. Szabò, A. Doni, J. Cibella and **A. Viola**. 2011. Serotonin-Mediated Tuning of Human Helper T Cell Responsiveness to the Chemokine CXCL12. *PlosOne*, 6(8):e22482.
54. Molon B, Ugel S, Del Pozzo F, Soldani C, Zilio S, Avella D, De Palma A, Mauri PL, Monegal A,

- Rescigno M, Savino B, Colombo P, Jonjic N, Pecanic S, Lazzarato L, Fruttero R, Gasco A, Bronte V, **Viola A**. 2011. Chemokine nitration prevents intratumoral infiltration of antigen-specific T cells. *The Journal of Experimental Medicine* 208(10):1949-62.
55. Zanotti L, Sarukhan A, Dander E, Castor M, Cibella J, Soldani C, Elisa Trovato A, Ploia C, Luca G, Calvitti M, Mancuso F, Arato I, Golemac M, Jonjic N, Biondi A, Calafiore R, Locati M, D'Amico G, **Viola A**. 2012. Encapsulated mesenchymal stem cells for in vivo immunomodulation. *Leukemia* 27(2):500-3.
56. Molon B, **Viola A**, Bronte V. 2012. Smoothing T cell roads to the tumor: Chemokine post-translational regulation. *Oncoimmunology*. 1(3):390-392.
57. **Viola A**, Sarukhan A, Bronte V, Molon B. 2012. The pros and cons of chemokines in tumor immunology. *Trends Immunol*. 33: 496-504.
58. Mazzon C, Anselmo A, Soldani C, Cibella J, Ploia C, Moalli F, Burden SJ, Dustin ML, Sarukhan A, **Viola A**. 2012. Agrin is required for survival and function of monocytic cells. *Blood* 119(23):5502-11.
59. Meisel M, Hermann-Kleiter N, Hinterleitner R, Gruber T, Pfeiffer-Obermair C, Fresser F, Leitges M, Soldani C, **Viola A**, Kaminski S, Baier G. 2013. PKC $\alpha$  selectively regulates IL-17A during TH17 immune responses in vitro and in vivo. *Immunity* 38(1):41-52.
60. Gruber T, Hinterleitner R, Hermann-Kleiter N, Meisel M, Kleiter I, Wang CM, **Viola A**, Pfeiffer-Obermair C, Baier G. 2013. Cbl-b mediates TGF $\beta$  sensitivity by downregulating inhibitory SMAD7 in primary T cells. *J Mol Cell Biol*. 5(6):358-68.
61. Riboldi E, Porta C, Morlacchi S, **Viola A**, Mantovani A, Sica A. 2013. Hypoxia-mediated regulation of macrophage functions in pathophysiology. *Int Immunol*. 25(2):67-75.
62. Kallikourdis M, Trovato AE, Anselmi F, Sarukhan A, Roselli G, Tassone L, Badolato R, **Viola A**. 2013. The CXCR4 mutations in WHIM syndrome impair the stability of the T cell immunological synapse. *Blood* 122(5):666-73.
63. Wang CM, Ploia C, Anselmi F, Sarukhan A, **Viola A**. 2014. ATP acts as a paracrine signaling molecule to reduce the motility of T cells. *EMBO J* 33(12):1354-64.
64. Muscolini M, Camperio C, Porciello N, Caristi S, Capuano C, **Viola A**, Galandrini R, Tuosto L. 2015. Phosphatidylinositol 4-Phosphate 5-Kinase  $\alpha$  and Vav1 Mutual Cooperation in CD28-Mediated Actin Remodeling and Signaling Functions. *J Immunol*. 194(3):1323-33.
65. Kallikourdis M, **Viola A**., Benvenuti F. 2015. Human immunodeficiencies related to APC/T cell interaction. *Frontiers in Immunology*. 6:433.
66. Sarukhan A, Zanotti L, **Viola A**. 2015. Mesenchymal stem cells: myths and reality. *Swiss Medical Wkly*. 145:w14229.
67. Kallikourdis M, Trovato AE, Roselli G, Muscolini M, Porciello N, Tuosto L, **Viola A**. 2016. Phosphatidylinositol 4-phosphate 5-kinase  $\beta$  controls recruitment of lipid rafts into the immunological synapse. *The Journal of Immunology* 196(4):1955-63.
68. Anselmo A, Lauranzano E, Soldani C, Ploia C, Angioni R, D'Amico G, Sarukhan A, Mazzon C, **Viola A**. 2016. Identification of a novel agrin-dependent pathway in cell signaling and adhesion within the erythroid niche. *Cell Death and Differentiation* 23(8):1322-30.
69. Molon B, Cali B, **Viola A**. 2016. T cells and cancer: how metabolism shapes immunity. *Frontiers in Immunology* 7:20.
70. Zanotti L., Angioni A., Cali B., Soldani C., Ploia C., Moalli F., Gargasha M., D'Amico G., Elliman S., Tedeschi G., Maffioli E., Negri A., Zacchigna S., Sarukhan A., Stein J.V. and **Viola A**. 2016. Mouse Mesenchymal stem cells inhibit high endothelial cell activation and lymphocyte homing to lymph nodes by releasing TIMP-1. *Leukemia* 30(5):1143–1154.
71. Pozzobon T, Goldoni G, **Viola A**, Molon B. 2016. CXCR4 signaling in health and disease. *Immunol Lett*. 177:6-15.
72. Larghi P., **Viola A**., Molon B. 2017. Analysis of T Cell Activation by Confocal Microscopy. *Methods Mol Biol*. 1514:63-81.
73. Roselli G., Martini E., Lougaris V., Badolato R., **Viola A**. and Kallikourdis M. CXCL12 mediates aberrant costimulation of B lymphocytes in WHIM immunodeficiency. *Front Immunol*. 8:1068.
74. Porciello N., Kunkl M., **Viola A**., Tuosto L. 2016. Phosphatidylinositol 4-Phosphate 5-Kinases in the Regulation of T Cell Activation. *Front Immunol*. 7:186.
75. Cali B., Molon B., **Viola A**. 2017. Tuning cancer fate: the unremitting role of host immunity. *Open Biol*. 7(4).
76. Maffioli E., Nonnis S., Angioni R., Santagata F., Cali B., Zanotti L., Negri A., **Viola A**., Tedeschi G. 2017. Proteomic analysis of the secretome of human bone marrow-derived mesenchymal stem cells primed by pro-inflammatory cytokines. *J Proteomics*. 166:115-126.
77. Zumerle S., Molon B. and **Viola A**. 2017. Membrane rafts in T cell activation: a spotlight on CD28-costimulation. *Front Immunol*. 8:1467.
78. Zumerle S, Cali B, Munari F, Angioni R, Di Virgilio F, Molon B, **Viola A**. 2019. Intercellular Calcium

- Signaling Induced by ATP Potentiates Macrophage Phagocytosis. *Cell Rep.* 27(1):1-10.
79. **Viola A**, Munari F, Sánchez-Rodríguez R, Scolaro T, Castegna A. 2019. The Metabolic Signature of Macrophage Responses. *Front Immunol.* 10:1462.
80. Zaramella P, Munari F, Stocchero M, Molon B, Nardo D, Priante E, Tosato F, Bonadies L, **Viola A**, Baraldi E. 2019. Innate immunity ascertained from blood and tracheal aspirates of preterm newborn provides new clues for assessing bronchopulmonary dysplasia. *PLoS One.* 14(9):e0221206.
81. Lindoso RS, Lopes JA, Binato R, Abdelhay E, Takiya CM, Miranda KR, Lara LS, **Viola A**, Bussolati B, Vieyra A, Collino F. 2019. Adipose Mesenchymal Cells-Derived EVs Alleviate DOCA-Salt-Induced Hypertension by Promoting Cardio-Renal Protection. *Mol Ther Methods Clin Dev.* 16:63-77.
82. Herkenne S, Ek O, Zamberlan M, Pellattiero A, Chergova M, Chivite I, Novotná E, Rigoni G, Fonseca TB, Samardzic D, Agnellini A, Bean C, Di Benedetto G, Tiso N, Argenton F, **Viola A**, Soriano ME, Giacomello M, Ziviani E, Sales G, Claret M, Graupera M, Scorrano L. 2020. Developmental and tumour angiogenesis requires the mitochondria-shaping protein Opa1. *Cell Metabolism*, 31(5):987-1003.
83. Castegna A, Gissi R, Menga A, Montopoli M, Favia M, **Viola A**, Canton M. 2020. Pharmacological targets of metabolism in disease: opportunities from macrophages. *Pharmacology & Therapeutics*, in press.
84. Angioni R, Herkenne S, Liboni C, Sánchez-Rodríguez R, Borile G, Muraca M, Cali B, **Viola A**. 2020. CD73+ extracellular vesicles inhibit angiogenesis through adenosine A2B receptor signalling. *Journal of Extracellular Vesicles*, in press.
85. Sánchez-Rodríguez R, Munari F, Angioni R, Venegas F, Agnellini A, Castro-Gil MP, Castegna A, Luisetto R, **Viola A\***, Canton M. 2020. Targeting monoamine oxidase to dampen NLRP3 inflammasome activation in inflammation. *Cellular & Molecular Immunology*, in press. (\* co-last, corresponding author).

**Patents**

- "Nitric oxide furoxan derivative compounds endowed with antitumoral activity" PCT/EP2009/000206, 15/01/2009;
- "Nuovi derivati furossanici idrosolubili aventi attività antitumorale" MI2010A000287, 23/10/2010;
- "New anti-angiogenic extracellular vesicles" PCT/IB2016/057608, 14/12/2016.

Padua, 18/05/2020

