

FLAVIA BAZZONI
CURRICULUM VITAE

PLACE OF BIRTH: VERONA
DATA OF BIRTH: MARCH 19, 1961
CITIZENSHIP: ITALIAN
ADDRESS: VERONA, VIA SANTE CREARA,7
POSITION: ASSOCIATE PROFESSOR
INSTITUTION: DEPARTMENT OF MEDICINE, DIVISION OF GENERAL PATHOLOGY, UNIVERSITY OF VERONA.

EDUCATION

March 10, 1987: Degree in "Biological Sciences" from the University of Padova (Italy), Faculty of Mathematical, Physical and Natural Sciences. Thesis on "Dissociation between the activation of phosphoinositide turnover and of NADPH oxidase in human neutrophils".
June 17, 1993: Doctoral degree in "Cellular and Molecular Biology and Pathology". Thesis on "Tumor necrosis factor alfa: transcriptional and translational control".

PROFESSIONAL CAREER

1984-1987: under-graduate internship at the Institute of General Pathology, Faculty of Medicine, University of Verona, under the supervision of Prof. Filippo Rossi.
1987-1988: holder of a scholarship from the "Consorzio per lo sviluppo degli Studi Universitari". Institute of General Pathology, Faculty of Medicine, University of Verona.
1988: visiting scientist in Prof. Antony Segal laboratory, Department of Medicine, University College, Londra.
1988-1992: PhD student in "Cellular and Molecular Biology and Pathology" at the University of Verona.
1990: visiting scientist in Prof. Marco Baggiolini laboratory, Theodor Kocher Institute, University of Bern.
1991-1992: visiting scientist at the Howard Hughes Medical Institute, Southwestern Medical Center at Dallas, Texas, in the laboratory of Prof. Bruce Beutler.
1992-1994: post doctoral fellow in Prof. Bruce Beutler laboratory, at Howard Hughes Medical Institute, Southwestern Medical Center at Dallas, Texas.
1994-1995: Research Associate in Prof. Bruce Beutler laboratory, at Howard Hughes Medical Institute, Southwestern Medical Center at Dallas, Texas.
1994: appointed as Researcher at the Institute of General Pathology, University of Medicine, Verona, Italy.
2004-today: appointed as Associate Professor at the Department of Pathology and Diagnostics, University of Verona.

ACADEMIC APPOINTMENTS

2006-2008 member of the Evaluation Committee for allocation funds (ex 60%) of the Faculty of Medicine, University of Verona
2008-2010 member of the committee for the Research and Development of the Faculty of Medicine, University of Verona
2012-2014 member of the Academic Senate, University of Verona

TEACHING

1995-today: lectures on "Chronic Inflammation", course of General Pathology, School of Medicine, Verona.
1997: lecture on "TNF ligand:receptor families", course of "Cytokines in Immunity", Scuola

Superiore d'Immunologia Ruggero Cepellini.

1998-2000: teacher of the course “Genetic Engineering”, School of Specialization in Clinical Biology, School of Medicine, Verona.

1998-today: teacher of the course “General Pathology”, School of Medicine, Verona

1999-today: member of the graduate school of Translational Biomedical Sciences, PhD course in “Cellular and Molecular Biology and Pathology”.

1996-today: tutor for undergraduate and graduate students and PhD student supervisor.

2014: Supervisor Master's student in “Biochimie et Biologie Moleculaire et Cellulaire”, at the Universite Libre de Bruxelles.

2016: Supervisor Master's student of the Graduate School of Life Sciences (GSLs), UMC Utrecht & Utrecht University.

EDITORIAL ACTIVITY

Ad hoc Reviewer for:

International Journals: Blood, Journal of Immunology, PlosGenetics, European Journal of Immunology, Journal of Leukocyte Biology, Molecular and Cellular Biology, Molecular Immunology, European Cytokine Network, Immunology, Immunology Letters, Cancer Research, Journal of International Cancer.

Grant application: Agence National de la Recher (“Blanc” Program 2012), Projet d'Action de Recherche Concertee, Université Libre de Bruxelles (ULB, 2006-2011), Fondazione per la Ricerca sulla Fibrosi Cistica, Fondazione per la Ricerca sulla Sclerosi Multipla, Progetti di Ateneo dell'Università degli Studi di Padova, Università degli Studi di Verona (fondi ex 60%).

Member of the Editorial Board of Genes & Immunity.

Associate Editor of Frontiers in Immunology, section Cytokines and Soluble Mediators in Immunity.

SCIENTIFIC ACTIVITY AND FOUNDING

Member of the Società Italiana di Immunologia, Immunologia Clinica e Allergologia (SIICA) and of the Society for Leukocyte Biology.

From 2014 member of the Directory Board of SIICA.

Author or co-author of 55 manuscripts published in international journals reviewed in the Current Contents (Life Science).

Author or co-author of 24 abstracts published in International scientific journal or congress act.

Since 1995, group leader in the Department of Pathology and Diagnostics, Unit of General Pathology, University of Verona.

Principal Investigator of several research project, founded by National/International agencies, after peer-review evaluation:

RESEARCH INTERESTS

A) Characterization of the molecular mechanisms responsible of NADPH oxidase activation in human polymorphonuclear neutrophils.

B) Modulation of human macrophage and neutrophils activity by IFN γ and LPS.

C) Cytokine and chemokine production by human polymorphonuclear neutrophils.

D) Transcriptional and post-transcriptional regulation of TNF- α biosynthesis.

E) Mechanisms of TNF α receptors activation.

F) Negative regulation of the inflammatory response: molecular mechanisms of IL-10 antiinflammatory activity.

G) non-coding RNA in the inflammatory response.

H) Epigenetic control of the inflammatory response.

BIBLIOMETRIC PARAMETERS

WEB OF SCIENCE (02/05/2018)

H INDEX : 30

SUM OF TIMES CITED 4297

SCOPUS (02/05/2018)

H INDEX : 29

SUM OF TIMES CITED 4346

PUBLICATIONS

1. Giordano G, Febbraro A, Tomaselli E, Sarnicola ML, Parcesepe P, Parente D, Forte N, Fabozzi A, Remo A, Bonetti A, Manfrin E, Ghasemi S, Ceccarelli M, Cerulo L, Bazzoni F, Pancione M.
Cancer-related CD15/FUT4 overexpression decreases benefit to agents targeting EGFR or VEGF acting as a novel RAF-MEK-ERK kinase downstream regulator in metastatic colorectal cancer.
J Exp Clin Cancer Res. 2015 Oct 1;34(1):108. doi: 10.1186/s13046-015-0225-7 (IF 4.429).
2. Monica Castellucci, Marzia Rossato, Federica Calzetti, Nicola Tamassia, Stefano Zeminian, Marco A. Cassatella, and Flavia Bazzoni.
IL-10 disrupts the Brd4-docking sites to inhibit LPS-induced CXCL8 and TNF- α expression in monocytes: implication for COPD.
Journal of Allergy and Clinical Immunology, 2015 Jun 1. pii: S0091-6749(15)00585-0. doi: 10.1016/j.jaci.2015.04.023 (IF:11.248)
3. Maili Zimmermann, Francisco Bianchetto Aguilera, Monica Castellucci, Marzia Rossato, Sara Costa, Claudio Lunardi, Renato Ostuni, Giampiero Girolomoni, Giocchino Natoli, Flavia Bazzoni, Nicola Tamassia, & Marco A. Cassatella
Chromatin remodelling and autocrine TNF α are required for optimal interleukin-6 expression in activated human neutrophils.
Nature Communications, 2015; 6:6061 | DOI: 10.1038/ncomms7061 (IF: 10.742)
4. Tamassia N, Cassatella MA, **Bazzoni F**. Fast and accurate quantitative analysis of cytokine gene expression in human neutrophils. *Methods in Molecular Biology* 2014, "Neutrophils Methods And Protocols", 1124:451-487.
5. Sarath Kiran Channavajjhala, Marzia Rossato, Francesca Morandini, Annalisa Castagna, Francesca Pizzolo, **Flavia Bazzoni** and Oliviero Olivieri. Optimizing the purification and analysis of miRNAs from urinary exosomes. *Clinical Chemistry and Laboratory Medicine*, 2014; 52:345-54.
6. Graziella Curtale, Massimiliano Mirolò , Tiziana Renzi, Marzia Rossato, **Flavia Bazzoni**, Massimo Locati. Negative regulation of Toll-Like Receptor 4 signalling by the IL-10-dependent microRNA-146b. *Proceeding of the National Academy of Science U.S.A.*, 2013, 110:11499-504.

7. Nicola Tamassia, Maili Zimmermann, Monica Castellucci, Renato Ostuni, Kirsten Bruderek, Bastian Schilling, Sven Brandau, **Flavia Bazzoni**, Gioacchino Natoli, and Marco A. Cassatella. Cutting edge: An Inactive Chromatin Configuration at the IL-10 Locus in Human Neutrophils. *The Journal of Immunology*, 2013, 190:1921-5.
8. Marzia Rossato, Graziella Curtale, Nicola Tamassia, Monica Castellucci, Laura Mori, Sara Gasperini, Barbara Mariotti, Mariacristina De Luca, Massimiliano Mirolo, Marco A. Cassatella, Massimo Locati and **Flavia Bazzoni**. IL-10–induced microRNA-187 negatively regulates TNF- α , IL-6, and IL-12p40 production in TLR4-stimulated monocytes. *Proceeding of the National Academy of Science U.S.A.*, 2012, 109:18257-18258, E3101-3110.
9. Tamassia N, **Bazzoni F**, Le Moigne V, Calzetti F, Masala C, Grisendi G, Bussmeyer U, Scutera S, De Gironcoli M, Costantini C, Musso T, Cassatella MA. IFN- β expression is directly activated in human neutrophils transfected with plasmid DNA and is further increased via TLR-4-mediated signaling. *The Journal of Immunology*, 2012, 189:1500-15009.
10. Martin S. Davey, Nicola Tamassia, **Flavia Bazzoni**, Federica Calzetti, Kirsten Bruderek, Marina Sironi, Lisa Zimmer, Barbara Bottazzi, Alberto Mantovani, Sven Brandau, Bernhard Moser, Matthias Eberl, and Marco A. Cassatella. Failure to detect production of IL-10 by human neutrophils. *Nature Immunology*, 2011, 12:1017-1018
11. Giacomelli BM, Tamassia N, Moratto D, Bertolini P, Ricci G, Bertulli C, Plebani A, Cassatella M, **Bazzoni F**, Badolato R. SH2 domain mutations of STAT3 gene result in impairment of IL-10 function in hyper-IgE syndrome patients. *European Journal of Immunology* 2011, 41:3075-3084
12. Vairo D, Tassone L, Tabellini G, Tamassia N, Gasperini S, **Bazzoni F**, Plebani A, Porta F, Notarangelo LD, Parolini S, Giliani S, Badolato R. Severe impairment of IFN $\{\gamma\}$ and IFN $\{\alpha\}$ responses in cells of a patient with a novel STAT1 splicing mutation. *Blood*. 2011, 118:1806-1817
13. Francesca Morandini, Linda Avesani, Luisa Bortesi, Bart Van Droogenbroeck, Elsa Arcalis, **Flavia Bazzoni**, Luca Santi, Annalisa Brozzetti, Alberto Falorni, Eva Stoger, Ann Depicker, Mario Pezzotti. Non-food/feed seeds as biofactories for the high yield production of recombinant pharmaceuticals. *Plant Biotechnology Journal* 2011, 9:911-921.
14. **Flavia Bazzoni**, Nicola Tamassia, Marzia Rossato and Marco A. Cassatella. Understanding the molecular mechanisms of the multifaceted IL-10-mediated anti-inflammatory response: lessons from neutrophils. *European Journal of Immunology* 2010, 40:2360-2368.
15. Nicola Tamassia, Monica Castellucci, Marzia Rossato, Sara Gasperini, Daniela Bosisio, Mauro Giacomelli, Raffaele Badolato, Marco A. Cassatella and **Flavia Bazzoni**. Uncovering an IL-10-dependent NF- κ B recruitment to the IL-1ra promoter that is impaired in STAT3 functionally defective patients. *FASEB Journal* 2010, 24: 1365-1375.
16. Luisa Bortesi, Marzia Rossato, Flora Schuster, Nicole Raven, Johannes Stadlmann, Linda Avesani, Alberto Falorni, **Flavia Bazzoni**, Ralph Bock, Stefan Schillberg, Mario Pezzotti. Viral and murine interleukin-10 are correctly processed and retain their biological activity when produced in tobacco. *BMC Biotechnology* 2009, 9:22.

17. **Flavia Bazzoni**, Marzia Rossato, Marco Fabbri, Daniele Gaudiosi, Massimiliano Mirolo, Laura Mori, Nicola Tamassia, Alberto Mantovani, Marco A. Cassatella, and Massimo Locati. Induction and regulatory function of miR-9 in human monocytes and neutrophils exposed to proinflammatory signals. *Proceeding of the National Academy of Science U.S.A.*, 2009, 106 (13):5282-5287.
18. Nicola Tamassia, Vincent Le Moigne, Marzia Rossato, Marta Donini, Stephen McCartney, Federica Calzetti, Marco Colonna, **Flavia Bazzoni** and Marco Cassatella. Activation of an immunoregulatory and antiviral gene expression program in poly(I:C)-transfected human neutrophils. *The Journal of Immunology* 2008, 181:6563-6573.
19. N. Tamassia, M. A. Cassatella, and **F. Bazzoni**. Fast and accurate quantitative analysis of cytokine gene expression in human neutrophils by reverse transcription real-time PCR. *Methods in Molecular Biology* 2007, "Neutrophils Methods And Protocols", 138:455-471.
20. N. Tamassia, F. Calzetti, N. Menestrina, M. Rossato, **F. Bazzoni**, L. Gottin, and M.A. Cassatella. Circulating neutrophils of septic patients constitutively express interleukin-10R1 (IL-10R1) and are promptly responsive to IL-10. *International Immunology* 2008, 20:535-541.
21. P. Scapini, **F. Bazzoni**, M.A.Cassatella. Regulation of B-cell-activating factor (BAFF)/B lymphocyte stimulator (BLyS) expression in human neutrophils. *Immunology Letters* 2008, 116:1-6.
22. M. Rossato, S. Cencig, S. Gasperini, M.A. Cassatella and **F. Bazzoni**. IL-10 modulates cytokine gene transcription by protein synthesis-independent and dependent mechanisms in lipopolysaccharide-treated neutrophils. *European Journal of Immunology* 2007, 37:3176-3189.
23. N. Tamassia, F. Calzetti, T. Ear, A. Cloutier, S. Gasperini, **F. Bazzoni**, P. McDonald, M.A. Cassatella. Molecular mechanisms underlying the synergistic induction of CXCL10 by LPS and IFN γ in human neutrophils. *European Journal of Immunology* 2007, 37:2627-2634.
24. M.A. Cassatella, N. Tamassia, L. Crepaldi, P.P. McDonald, T. Ear, F. Calzetti, S. Gasperini, F. Zanderigo, and **F. Bazzoni**. Lipopolysaccharide primes neutrophils for a rapid response to IL-10. *European Journal of Immunology* 2005, 35: 1877-1885.
25. P. Perrier, F. O. Martinez, M. Locati, G. Bianchi, M. Nebulosi, G. Vago, **F. Bazzoni**, S. Sozzani, P. Allavena, and A. Mantovani. Distinct transcriptional programs activated by interleukin-10 with or without lipopolysaccharide in dendritic cells: induction of the B cell-activating chemokine, CXC chemokine ligand 13. *The Journal of Immunology* 2004, 172: 7031-7042.
26. L. Gatto, C. Berlato, V. Poli, S. Tininini, I. Kinjio, A. Yoshimura, M.A. Cassatella, **F. Bazzoni**. Analysis of SOCS-3 promoter responses to Interferon γ . *The Journal of Biological Chemistry* 2004, 279:13746-13754.
27. C. Berlato, M.A. Cassatella, I. Kinjyo, L. Gatto, A. Yoshimura, **F. Bazzoni**. Involvement of suppressor of cytokine signaling-3 as a mediator of the inhibitory effects of IL-10 on

- lipopolysaccharide-induced macrophage activation. *The Journal of Immunology* 2002, 168:6404-6411.
28. S. Gasperini, L. Crepaldi, F. Calzetti, L. Gatto, C. Berlato, **F. Bazzoni**, A. Yoshimura, M.A. Cassatella. Interleukin-10 and cAMP-elevating agents cooperate to induce suppressor of cytokine signaling-3 via a protein kinase A-independent signal. *European Cytokine Network* 2002, 13, 47-53.
 29. **F. Bazzoni** and E. Regalia. Triggering of antitumor activity through melanome-specific transduction of a constitutively active tumor necrosis factor (TNF) R1 chimeric receptor in the absence of TNF- α . *Cancer Research* 2001, 61, 1050-1057.
 30. P. Scapini, J.A. Lapinet Vera, S. Gasperini, F. Calzetti, **F. Bazzoni**, M.A. Cassatella. The neutrophil as a source of chemokines. *Immunological Reviews* 2000, 177: 195-203.
 31. **F. Bazzoni**, L. Gatto, L. Lenzi, F. Vinante, G. Pizzolo, E. Zanolin, M. De Gironcoli. Identification of novel polymorphisms in the human TNF-R1 gene: distribution in acute leukemia patients and healthy individuals. *Immunogenetics* 2000, 51:159-163.
 32. **F. Bazzoni**, S. Giovedí, M.C. Kiefer and M.A. Cassatella. Analysis of the BAK protein expression in human polymorphonuclear neutrophils. *International Journal of Clinical & Laboratory Research* 1999, 29:41-45.
 33. B. Beutler, **F. Bazzoni**. TNF, apoptosis and autoimmunity: a common thread? *Blood Cell, Molecules, and Disease* 1998, 24:216-230.
 34. C. Gueydan, V. Kruys and **F. Bazzoni**. Tumor Necrosis Factor: from production to action. *Bioforum International* 1998, 2: 18-20.
 35. **F. Bazzoni** and B. Beutler. The Tumor Necrosis Factor ligand and receptor families. *New England Journal of Medicine* 1996, 334: 1717-1725.
 36. **F. Bazzoni** and B. Beutler. How do Tumor Necrosis Factor receptors work? *Journal of Inflammation* 1995, 45: 221-238.
 37. A.N. Poltorak, **F. Bazzoni**, I.I. Smirnova, E. Alejos, P. Thompson, G. Lueshi, N. Rothwell, and B. Beutler. MIP-1 gamma: molecular cloning, expression and biological activities of a novel CC chemokine that is constitutively secreted in vivo. *Journal of Inflammation* 1995, 45: 207-219.
 38. **F. Bazzoni** and B. Beutler. Comparative expression of TNF- α alleles from normal and autoimmune-prone mice MHC haplotypes. *Journal of Inflammation* 1995, 45: 106-114.
 39. **F. Bazzoni**, E. Alejos, B. Beutler. Chimeric TNF receptors with constitutive signaling activity. *Proceeding of the National Academy of Science U.S.A.* 1995, 92: 5376-5380.
 40. **F. Bazzoni**, V. Kruys, A. Shakhov, C.V. Jongeneel, and B. Beutler. Analysis of TNF promoter responses to ultraviolet light. *Journal of Clinical Investigation* 1994, 93:56-62.
 41. M.A. Cassatella, **F. Bazzoni**, A.D'Andrea, M. Tronchin, M. Cheska, M. De Gironcoli, and F. Rossi. Studies on the production of proinflammatory cytokines and on the modulation of

- gene expression for some NADPH oxidase components by phagocytosing human neutrophils. *Fundamental and Clinical Immunology* 1993, 1:99-106
42. M.A.Cassatella, I.Guasparri, M.Ceska, **F.Bazzoni**, and F.Rossi. Interferon gamma inhibits interleukin-8 production by human polymorphonuclear leukocytes. *Immunology* 1993, 78: 177-184.
 43. M.A.Cassatella, **F.Bazzoni**, M.Ceska, I.Ferro, M.Baggiolini and G.Berton. IL-8 production by human polymorphonuclear leukocytes. The chemoattractant formyl-methionyl-leucyl-phenylalanine induces the gene expression and release of IL-8 through a pertussis toxin-sensitive pathway. *The Journal of Immunology* 1992, 148: 3216-3220.
 44. M.A.Amezaga, **F.Bazzoni**, C.Sorio, F.Rossi and M.A.Cassatella. Evidence for the involvement of distinct signal transduction pathways in the regulation of constitutive and interferon-gamma dependent gene expression of NADPH oxidase components (gp91-phox, p47-phox, and p22-phox) and high affinity receptor for IgG (Fc gamma R-1) in human polymorphonuclear leukocytes. *Blood* 1992, 79:735-744.
 45. M.A.Cassatella, **F.Bazzoni**, F.Calzetti, I.Guasparri, F.Rossi and G.Trinchieri. Interferon-gamma transcriptionally modulates the expression of the genes for the high affinity IgG-Fc receptor and the 47-kDa cytosolic component of NADPH oxidase in human polymorphonuclear leukocytes. *The Journal of Biological Chemistry* 1991, 266: 22079-22082.
 46. **F.Bazzoni**, M.A.Cassatella, C.Laudanna and F.Rossi. Phagocytosis of opsonized yeast induces tumor necrosis factor- α mRNA accumulation and protein release by human polymorphonuclear leukocytes. *The Journal of Leukocyte Biology* 1991, 50: 223-228.
 47. M.A.Cassatella, D.Peroni, M.A.Amezaga, F.Vicentini, **F.Bazzoni**. Amiloride does not influence the capability of interferon gamma to potentiate superoxide anion and hydrogen peroxide release by human mononuclear phagocytes. *Immunology Letters* 1991, 28:1-4.
 48. **F.Bazzoni**, M.A.Cassatella, F.Rossi, M.Ceska, B.Dewald, M.Baggiolini. Phagocytosing neutrophils produce and release high amounts of the neutrophil-activating peptide 1/interleukin 8. *The Journal of Experimental Medicine* 1991, 173: 771-774.
 49. M.A.Cassatella, **F.Bazzoni**, M.A.Amezaga, F.Rossi. Studies on the gene expression of several NADPH oxidase components. *Biochemical Society Transactions* 1991, 19:63-67.
 50. M.A.Cassatella, **F.Bazzoni**, R.Flynn, S.Dusi, G.Trinchieri and F.Rossi. Molecular basis of interferon-gamma and lipopolysaccharide enhancement of phagocyte respiratory burst capability in human neutrophils. Studies on gene expression of several NADPH oxidase components. *The Journal of Biological Chemistry* 1990, 265: 20241-20246.
 51. M.A.Cassatella, R.M.Flynn, M.A.Amezaga, **F.Bazzoni**, F.Vicentini, G.Trinchieri. Interferon-gamma induces in human neutrophils and macrophages expression of the mRNA for the high affinity receptor for monomeric IgG (Fc gamma R-1 CD 64). *Biochemical and Biophysical Research Communication* 1990, 170: 582-588.

52. P.Bellavite, **F.Bazzoni**, M.A.Cassatella, K.J.Hunter, J.V.Bannister. Isolation and characterization of a cDNA clone for a novel serine-rich neutrophil protein. *Biochemical and Biophysical Research Communication* 1990, 170: 915-922.
53. P.Bellavite, **F.Bazzoni**, G.Scolaro, G.Poli, S.Dusi, and M.A.Cassatella. Genetic defect of phagocyte NADPH oxidase activity and activation. *International Journal of Immunopathology and Pharmacology* 1989, 2: 75-86.
54. F.Rossi, V.Della Bianca, M.Grzeskowiak, **F.Bazzoni**. Studies on molecular regulation of phagocytosis in neutrophils. ConA-mediated ingestion and associated respiratory burst independent of phosphoinositide turnover, rise in $[Ca^{2+}]_i$, and arachidonic acid release. *The Journal of Immunology* 1989, 142: 1652-1660.
55. M.C.Serra, **F.Bazzoni**, V.Della Bianca, M.Grezkowiak and F.Rossi. Activation of human neutrophils by Substance P. Effect on oxidative metabolism, exocytosis, cytosolic Ca^{2+} concentration and inositol phosphates formation. *The Journal of Immunology* 1988, 141: 2118-2124.