

# **Curriculum Vitae**

## **Prof. Francesco Michelangelo Turrini**

### **Notizie di carriera**

- ha conseguitola Laurea in Medicina e Chirurgia nel 1983.
- Nel 1985, 1986, 1987 contratto di ricerca presso il Max-Planck-Institut für Biophysik di Francoforte sui sistemi di trasporto delle cellule renali in relazione allo sviluppo di nuovi farmaci .
- Nel 1988-1990 contratto di *post-dottorato* presso il Max-Planck-Institut für Biophysik, di Francoforte
- 1992-93 attività di ricerca presso la Purdue University (USA) e il Dipartimento di Biochimica, Ebrew University - Gerusalem
- 1993 Ricercatore di Biochimica presso l'Università di Torino
- nel 1995 Professore associato di Biochimica presso la Facoltà di Medicina di Torino
- 2001 a oggi Professore Ordinario di Biochimica presso la Facoltà di medicina di Torino
- dal 1999 al 2005 Direttore scientifico del laboratorio di Proteomica presso il Parco Scientifico della Sardegna
- Titolare dell' insegnamento di Biochimica Speciale presso il Corso di Laurea di Medicina e Chirurgia
- Docente presso il corso di dottorato in Biochimica e Biotecnologia Cellulare, Università degli studi di Torino

- Docente presso il corso di dottorato in Proteomica Clinica, Università degli studi di Verona

## **Attività scientifica**

L'attività di ricerca è attualmente rivolta allo studio dei seguenti argomenti

1. Ricerca di antigeni malarici per lo sviluppo di nuovi vaccini
2. Ricerca nuovi markers diagnostici nelle neoplasie mediante spettrometria di massa nei tumori della vescica, rene, colon, mammella e nei melanomi.
3. Studio delle heat shock proteins nei tumori neuronali in relazione ai fenomeni di resistenza all'apoptosi per lo sviluppo di nuovi farmaci anti-tumorali
4. Studio delle modificazioni dell'endotelio nei processi di rivascolarizzazione e nel diabete per lo sviluppo di nuovi materiali bio-compatibili
5. Sviluppo di nuove tecnologie per lo studio parallelo del proteoma e dell'espressione genica per lo sviluppo di novi materiali per la ricerca e la diagnostica
6. Identificazione delle modificazioni indotte da ceppi batterici sul glutine in relazione alla risposta anticorpale nei pazienti celiaci
7. Sviluppo di sistemi diagnostici basati sulla real time PCR per la diagnosi oncologica
8. Sviluppo di sistemi diagnostici basati su microcromatografia / spettrometria di massa per la diagnosi oncologica
9. Regolazione della struttura della membrana eritrocitaria da parte di PTK
10. Automazione dei processi di produzion di biomolecole (proteine ricombinanti, anticorpi monoclonali)

Negli ultimi 5 anni ha gestito numerosi progetti di ricerca applicata e trasferimento tecnologico ed è coinvolto in alcuni consorzi europei finalizzati allo studio delle proteine in contesti patologici (MassProDiag, Oncoarray, ProteoDissect)

### **Elenco principali pubblicazioni**

1. P Arese, A Naitana, L Mannuzzu, F Turrini, CWM Haest, TM Fischer, B Deuticke  
Biochemical and microrheological modifications in normal and glucose-6-phosphate dehydrogenase-deficient red cells treated with divicine. in Advances in Red Cell Biology, (DJ Weatherall, G Fiorelli, S Gorini, eds). Raven Press, New York 1982, pp 375-380.
2. P Pescarmona, F Turrini, A Naitana, A Bosia, L Perroni  
Red cell G6PD-decay in circulating cells: A possible marker for variant identification. BBA 42, 253-257, 1983.
3. T Fischer, GP Pescarmona, A Bosia, A Naitana, F Turrini, P Arese  
Mechanism of red cell clearance in favism.  
BBA 42, 253-257, 1983
4. P Arese, R Miniero, T Fischer, F Turrini, GP Pescarmona  
Role of divicine from fava beans in hemolytic crisis occurring in G6PD deficient subjects.  
Ital J Biochem 34, 58-59, 1985. (I.F. 0.207)
5. F Turrini, GG Pinna, A Sisini, GP Pescarmona  
Analysis of membrane protein polymers formed by divicine action on G6PD-deficient erythrocytes.  
Electrophoresis 460-461, 1984 (I.F. 2.730)
6. MA Baker, A Bosia, GP Pescarmona, F Turrini, P Arese  
Mechanism of action of divicine in a cell free system and in G6PD-deficient red cells.  
Toxicol Pathol 12, 59, 1984. (IF 0.540)
7. F Turrini, A Naitana, L Mannuzzu, GP Pescarmona, P Arese  
Increased red cell calcium, decreased calcium extrusion and altered membrane proteins during fava bean hemolysis in G6PD-deficient (Mediterranean variant) individuals.  
Blood 66, 302-305, 1985. (IF 8.560)
8. A Satta, R Faedda, F Turrini, A Manca, E Bartoli  
Prevention of renal failure by diuretics.  
Z Kardiol 74, 179-185, 1985. (IF 0.499)
9. P Arese, L Mannuzzu, F Turrini, GF Gaetani, S Galiano  
Etiological aspects of favism.  
Glucose-6-phosphate Dehydrogenase (E Beutler, A Yoshida, eds) Academic Press, Orlando 1986, pp 45-75.
10. R Faedda, A Satta, F Turrini, E Bartoli  
Prevention of acute renal failure by diuretics and hydration.  
Diuretics. Basic, pharmacological and clinical aspects (A Andreucci, C Dalcanton, eds) Martinus Nijhof, Amsterdam 1986, pp 367-372.
11. TM Fischer, F Turrini, A Naitana, L Mannuzzu, P Arese  
Influence of mechanical factors on red cell hemolysis in favic crisis.  
30 years G6PD deficiency (P Arese, ed) ISI, Torino 1986, pp 16-19.
12. F Bussolino, F Turrini, P Arese  
Measurement of phagocytosis utilizing 14C-cyanate-labelled human red cells and monocytes.  
Br J Haematol 66, 271-274, 1987. (IF 2.616)
13. A Satta, B Contu, R Faedda, F Turrini, D Sorrentino, E Bartoli

In vitro effects of epinephrine on Na influx in brush border vesicles from rat kidneys.  
Eur Rev Med Pharmacol Sci 9, 233-238, 1987.

14. R Faedda, A Satta, F Turrini, E Bartoli  
Superoxide radicals in the pathophysiology of ischemic acute renal failure.  
Acute renal failure (A Amerio, G Coratelli, PF Massry, eds). Plenum press, New York 1987, pp 64-75, 1987.
15. F Turrini, L Mannuzzu, T Fischer F Bussolino, P Arese  
Animal models for the study of favism.  
Biomed Biophys Acta 46, 90-91, 1987
16. G Burckhardt, F Turrini, I Sabolich  
Influence of osmolarity on the Na-H exchanger in renal brush border membrane vesicles.  
Kidney Int 31, 406, 1987 (IF 3.995)
17. M Branca, T Denurra, F Turrini  
Reduction of nitroxide free radical by normal and G6PD deficient red blood cells.  
Free Rad Biol Med 5, 7-11, 1988. (IF 4.089)
18. D Ghigo, F Bussolino, G Garbarino, R Heller, F Turrini, GP Pescarmona, L Pegoraro, A Bosia  
Role of Na/H exchange in thrombin-induced platelet-activating factor production by human endothelial cells.  
J Biol Chem 263, 19437-19446, 1988. (IF 7.385)
19. F Bussolino, F Turrini, P Arese  
PAF activates rat macrophages and enhances complement-mediated phagocytosis of slightly damaged red cells.  
Platet activating factor and cell immunology (P Braquet, ed), Karger, Basel 1988, pp 121-129.
20. F Bussolino, G Camussi, F Turrini, P Arese  
Human endothelial cells are target for platelet activating factor. Studies with BN 52021, a specific PAF antagonist.  
Gingkolides. Chemistry, biology and clinical perspectives (P Braquet, ed), Prous Science Publisher, Barcelona 1988, pp 245-259.
21. G Burckhardt, F Turrini  
Demonstration of ATP Driven transport in rat renal brush border vesicles.  
Pflugers Arch 412, 45, 1988 (IF 2.646)
22. F Bussolino, F Turrini, D Alessi, P Arese  
BN 52021 inhibits PAF induced increase of CR1 mediated phagocytosis.  
Gingkolides. Chemistry, biology and clinical perspectives (P Braquet, ed), Prous Science Publisher, Barcelona 1988, pp 117-124.
23. D Ghigo, S Treves, F Turrini, A Pannocchia, GP Pescarmona, A Bosia  
Role of Na/H exchanger in thrombin and arachidonic acid induced calcium influx in platelets.  
Biochim Biophys Acta 940, 141-148, 1988. (IF 2.5)
24. Ghigo, F Bussolino, G Garbarino, F Turrini, GP Pescarmona, A Bosia  
Role of Na/H exchange in thrombin mediated activation of human endothelial cell in culture.  
It J Biochem 37, 265-267, 1988. (IF 0.207)
25. P Arese, F Turrini, F Bussolino  
The natural anti-gal antibody, the B-like antigen, and human red cell ageing. A commentary.  
Blood Cells 14, 221-224, 1988.
26. F Bussolino, F Tessari, F Turrini, P Braquet, G Camussi, M Prosdocimi, A Bosia  
Platelet activating factor induces dopamine release in PC12 cell line.  
Am J Physiol 255, C559-C565, 1988 (IF 3.244)
27. F Turrini, I Sabolich, Z Zimolo, B Moeves, G Burckhardt  
Relation of ATPases in rat renal brush border membranes to ATP-driven H<sup>+</sup> secretion.  
J Membrane Biology 107, 1-12, 1989 (IF 2.844)
28. F Bussolino, JM Wang, F Turrini, D Alessi, C Costamagna, D Ghigo, GP Pescarmona, A Mantovani, A Bosia

Stimulation of the Na/H exchanger in human endothelial cells activated by granulocyte- and granulocyte-macrophage colony stimulating factor. Evidence for a role in proliferation and migration.

J Biol Chem 264, 18284-18287, 1989 (IF 7.384)

29. F Bussolino, JM Wang, P Defilippi, F Turrini, F Sanavio, CJS Edgell, M Aglietta, P Arese, A Mantovani: Granulocyte- and granulocyte-macrophage colony stimulating factor induce human endothelial cells to migrate and proliferate.

Nature 337, 471-473, 1989 ( IF 27.074)

30. F Bussolino, E Fischer, F Turrini, MD Kazatchkine, P Arese

Platelet activating factor enhances complement-dependent phagocytosis of diamide-treated erythrocytes by human monocytes through activation of protein kinase C and phosphorylation of complement receptor type one (CR1).

J Biol Chem 263, 21711-21719, 1989 (IF 7.384)

31. P Arese, L Mannuzzu, F Turrini

Pathophysiology of favism.

Folia Haematol 116, 745-752, 1989.

32. G Gaidano, D Ghigo, M Schena, S Treves, F Turrini, F Cappio, A Bosia

Na/H exchange activation mediates the lipopolysaccharide induced proliferation of human B lymphocytes and is impaired in malignant B chronic lymphocytic leukemia lymphocytes.

J Immunol 142, 913-918, 1989 (IF 7.412)

33. G Burckhardt, F Turrini

Regulation of chloride permeability in rat renal brush border membrane vesicles by protein kinase A and G Proteins.

The FASEB J. 3:554-555, 1989 (IF 13.404)

34. G Burckhardt, F Turrini, B Simon

ATP driven transport in intact and reconstituted rat renal brush border membrane vesicles.

Kidney international 35:452, 1989 (IF 3.995)

35. P Arese, F Turrini, S Fasler, HU Lutz

Recent advances in the biochemistry of favism.

Biomed Biochim Acta 49, S284-S288, 1990.

36. D Caracciolo, A Pannocchia, S Treves, D Ghigo, E Gallo, F Bussolino, F Turrini, G Tamponi, A Bosia

Role of Na/H exchange in the GM-CSF-dependent growth of a leukemic cell line.

J Cell Physiol 143, 133-139, 1990. (IF 3.049)

37. P Arese, F Turrini, F Bussolino

Is the increased phagocytosis of malaria infected variant erythrocytes due to early expression of normal senescence markers or to the formation of new and specific removal markers?

Blood Cells 16, 598-561, 1990

38. P Arese, F Turrini, F Bussolino, H Lutz

Recognition signals for phagocytic removal of falciparum malaria-infected and sickled erythrocytes

Red Blood Cell Ageing (M Magnani, A De Flora, eds) Plenum Press, New York 1991, 317-327.

39. F Turrini, R Faedda, A Satta, M Branca, E Bartoli

Increased brush border calcium permeability after reperfusion of ischemic rat kidney.

J Nephrol 2, 89-95, 1991.

40. F Turrini, P Arese, J Yuan, PS Low

Clustering of integral membrane proteins of human erythrocyte membrane stimulates autologous IgG binding, complement deposition, and phagocytosis.

J Biol Chem 266, 23611-23617, 1991. (IF 7.384)

41. P Arese, F Turrini, H Ginsburg

Erytrophagocytosis in malaria: Host Defence or menace to the macrophages

Parasitology Today 7:25-28, 1991 (3.296)

42. F Turrini, H Ginsburg, F Bussolino, GP Pescarmona, MV Serra, P Arese  
Phagocytosis of Plasmodium falciparum-infected human red blood cells by human monocytes: Involvement of immune and nonimmune determinants and dependence on parasite developmental stage.  
Blood, 80, 801-808, 1992. (IF 8.560)
43. P. Arese, FR Mannu, D Megow, F Turrini  
Band 3 and erythrocyte removal.  
Progress in Cell Research, vol. 2 (E Bamberg and H Passow, eds), Elsevier Science Publishers, Amsterdam, pp 229-238, 1992.
44. E Schwarzer, F Turrini, D Ulliers, G Giribaldi, H Ginsburg, P Arese  
Impairment of macrophage functions after ingestion of Plasmodium falciparum-infected erythrocytes or isolated malarial pigment.  
J Exper Med 176, 1033-1041, 1992. (IF 15.126)
45. MV Serra, F Mannu, A Matera, F Turrini, P Arese  
Enhanced IgG- and complement-independent phagocytosis of sulfatide-enriched human erythrocytes by human monocytes.  
FEBS Letters, 311, 67-70, 1992. (IF 3.842)
46. F Turrini, F Mannu, P Arese  
Diamide induced dimerization of human erythrocyte band 3 generates an anti-band 3 epitope on erythrocyte surface  
It J Biochem 5/92 (0.207)
47. E Schwarzer, F Turrini, G Giribaldi, P Arese  
Phagocytosis of P. falciparum malarial pigment hemozoin by human monocytes inactivates monocyte protein kinase  
Biochim Biophys Acta, 1181, 51-54, 1993. (IF 2.5)
48. F Turrini, F Mannu, P Arese, J Yuan, PS Low  
Characterization of the autologous antibodies that opsonize erythrocytes with clustered integral membrane proteins.  
Blood 81, 3146-3152, 1993. (IF 8.560)
49. A Bosia, D Ghigo, F Turrini, E Nissan, GP Pescarmona, H Ginsburg  
Kinetic characterization of Na/H antiport of P Falciparum membrane.  
J Cell Physiol 154, 527-534, 1993. ( IF 3.049)
50. L Fiori, R Rapelli, S Mirkarimi, P Cappuccinelli, H Ginsburg, F Turrini  
Reduced microbicidal and anti tumor activities of human monocytes after ingestion of P Falciparum-infected red blood cells.  
Parasite Immunol, 15:647 - 655, 1993 (IF 1.939)
51. F Turrini, E Schwarzer, P Arese  
The involvement of malarial pigment toxicity in depression of cellular immunity  
Parasitol Today, 9:297-300, 1993 (IF 3.296)
52. F Turrini, F Mannu, M Cappadoro, D Ulliers, G Giribaldi, P Arese  
Binding of naturally occurring antibodies to oxidatively and non oxidatively modified band 3.  
Biochim. Biophys. Acta 1190 297-303, 1994 (IF 2.5)
53. P Arese, M Cappadoro, G Giribaldi, F Turrini  
The malaria G6PD hypothesis revisited.  
Parassitology Today, vol 10 no.7, 262 - 264, 1994 ( IF 3.296)
54. E Schwarzer, F Turrini, P. Arese  
A luminescence method for the quantitative determination of phagocytosis of erythrocytes, of malaria parasitized erythrocytes and of malaria pigment.  
Br J Haem, 88, 740-745, 1994 (IF 2.616)
55. F Mannu, P Arese, MD Cappellini, G Fiorelli, M Cappadoro, G Giribaldi, F Turrini  
Role of hemichrome binding to erythrocyte membrane in the generation of band 3 alterations in beta thalassemia intermedia erythrocytes.  
Blood, 86, 2014-2020, 1995 (IF 8.560)

56. M Cappadoro, F Turrini G Giribaldi, P Arese, D Ulliers, E O'Brian, L Luzzatto  
Parasite cycle in *P falciparum* parasitized normal and G6PD deficient erythrocytes  
*Ann Trop Med Parasitol* 89, 159-162, 95
57. Shaimilev G, Krugliak D, Turrini F, Ginsburg H  
Antimicrobial drugs inhibit the phagocytosis of erythrocytes infected with plasmodium *falciparum*  
*Trans. R Soc Trop Med Hyg*, 95, 558-562, 1996
- 58 Sechi L , Pinna MP, Sanna P, Turrini F, Zanetti S, Fadda G  
Detection of M Tuberculosis by PCR analysis of urine and other clinical samples from AIDS and non HIV infected patients  
*Mol Cell Probes* 11, 281-285, 1997
- 59 Tola B, Manunta D, Cocco F, Turrini F, Leori G  
Characterization of membrane surface antigens of M agalatiae during natural infection  
*FEMS Microb letters*, 154, 335-362, 1997
- 60 Turrini F, Giribaldi G, Valente E, Arese P  
Mycoplasma contaminations of plasmodium *falciparum* cultures, a case of parasite parasitism  
*Parasitology Today* 13, 367-368, 1997
- 61 Ayi K, Cappadoro M, Branca M, Turrini F  
Plasmodium *falciparum* glutathione metabolism and growth are independent of glutathione system of host erythrocyte  
*FEBS letters* 424, 257-261, 1998
62. De Franceschi L, Turrini F, Mannu F, Ioloscon A  
Membrane modifications in CDA2 erythrocytes  
*Experimental Haematology* 26,869-873, 1998
- 63.M.Cappadoro, F.Turrini, G.Giribaldi, D.Ulliers, E.O.Brien, L.Luzzato, P.Arese  
Stage dependent expression of *P falciparum* G-6-PD gene and oxidative Pentosephosphate Pathway Activity in parasites grown in normal and G-6-PD deficient erythrocytes.  
*Blood*, 92,1-10, 1998
64. Walter I,Pippia P, Meloni G, Turrini F, Franca M  
Simulated microgravity inhibits the genetic expression of interleukin 2 and its receptor  
in mitogen activated T lymphocytes  
*FEBS letters*, accepted on 25-8-1998
65. B Mordmuller, F Turrini, Huayan Long, Peter Kremsner, P Arese  
Neutrophils and monocytes from subjects with the mediterranean G6PD variant: effect of Plasmodium *falciparum* hemozoin on G6PD activity, oxidative burst and cytokine production  
*Eur. Cytokine Netw.*, 9(3) 239-246, 1998
66. Tavazzi D, Comino A, Turrini F, Fiorelli G, Cappellini MD.  
Indices of membrane alterations in beta-thalassemic erythrocytes.  
*Hemoglobin*. 1998 Sep-Nov;22(5-6):483-92.
67. Palestro G, Turrini F, Pagano M, Chiusa L.  
Castleman's disease.  
*Adv Clin Path.* 1999 Jan-Apr;3(1-2):11-22. Review.
- 68.Walther I, Cogoli A, Pippia P, Meloni MA, Cossu G, Cogoli M, Schwarzenberg M, Turrini F, Mannu F.  
Human immune cells as space travelers.  
*Eur J Med Res.* 1999 Sep;9(9):361-3.
69. Aceti A, Zanetti S, Mura MS, Sechi LA, Turrini F, Saba F, Babudieri S, Mannu F, Fadda G.  
Identification of HIV patients with active pulmonary tuberculosis using urine based polymerase chain reaction assay.  
*Thorax*. 1999 Feb;54(2):145-6.
70. Cappellini MD, Tavazzi D, Duca L, Graziadei G, Mannu F, Turrini F, Arese P, Fiorelli .  
Metabolic indicators of oxidative stress correlate with haemichrome attachment to membrane, band 3 aggregation and erythrophagocytosis in beta-thalassaemia intermedia.

Br J Haematol. 1999 Mar;104(3):504-12.

71. Fiori PL, Rappelli P, Casu G, Delogu G, Turrini F, Cappuccinelli P.  
A pre-existing infection by *Mycobacterium avium* subsp. *avium* modulates anti-*Cryptococcus neoformans* and anti-*Candida albicans* activities in human macrophages.  
*Microb Pathog.* 2000 Aug;29(2):93-100.
72. Ponzetto A, Pellicano R, Leone N, Berrutti M, Turrini F, Rizzetto M.  
*Helicobacter pylori* seroprevalence in cirrhotic patients with hepatitis B virus infection.  
*Neth J Med.* 2000 Jun;56(6):206-10.
73. Ponzetto A, Pellicano R, Leone N, Cutufia MA, Turrini F, Grigioni WF, D'Errico A, Mortimer P, Rizzetto M, Silengo L.  
*Helicobacter* infection and cirrhosis in hepatitis C virus carriage: is it an innocent bystander or a troublemaker?  
*Med Hypotheses.* 2000 Feb;54(2):275-7.
74. De Franceschi L, Fattovich G, Turrini F, Ayi K, Brugnara C, Manzato F, Noventa F, Stanzial AM, Solero P, Corrocher R.  
Hemolytic anemia induced by ribavirin therapy in patients with chronic hepatitis C virus infection: role of membrane oxidative damage.  
*Hepatology.* 2000 Apr;31(4):997-1004.
75. Giribaldi G, Ulliers D, Mannu F, Arese P, Turrini F.  
Growth of *Plasmodium falciparum* induces stage-dependent haemichrome formation, oxidative aggregation of band 3, membrane deposition of complement and antibodies, and phagocytosis of parasitized erythrocytes.  
*Br J Haematol.* 2001 May;113(2):492-9
76. Defranceschi L, Villa Maruzzi C, Fumagalli L, Turrini F..  
KCl cotrasport modulated by intracellular Mg in erythrocytes from mice bred for low and high Mg levels  
*Am J Physiol* 2001, 281 (4) C1385-95
77. Santona A, Carta F, Fragni P, Turrini F  
Mapping of antigenic sites immunodominant surface lipoprotein AvgC of M agalatiae with the use of synthetic peptides  
*Infection and immunity,* 2002 January, 70(1) 171-6
- 78: Turrini F, Giribaldi G, Carta F, Mannu F, Arese P.  
Mechanisms of band 3 oxidation and clustering in the phagocytosis of *Plasmodium falciparum*-infected erythrocytes.  
*Redox Rep.* 2003;8(5):300-3. Review.
- 79: de Franceschi L, Turrini F, Honczarenko M, Ayi K, Rivera A, Fleming MD, Law T, Mannu F, Kuypers FA, Bast A, van der Vijgh WJ, Brugnara C.  
In vivo reduction of erythrocyte oxidant stress in a murine model of beta-thalassemia.  
*Haematologica.* 2004 Nov;89(11):1287-98.
- 80: Ayi K, Turrini F, Piga A, Arese P.  
Enhanced phagocytosis of ring-parasitized mutant erythrocytes: a common mechanism that may explain protection against falciparum malaria in sickle trait and beta-thalassemia trait.  
*Blood.* 2004 Nov 15;104(10):3364-71. Epub 2004 Jul 27.
- 81: Carta F, Crobu S, Turrini F.  
Characterization of sodium dodecylsulfate polyacrylamide gel electrophoresis-separated *M. agalactiae* membrane antigens by mass spectrometry.  
*Eur J Mass Spectrom (Chichester, Eng).* 2004;10(3):413-9.
- 82: Perrotta S, Borriello A, Scaloni A, De Franceschi L, Brunati AM, Turrini F, Nigro V, Miraglia Del Giudice E, Nobili B, Conte ML, Rossi F, Iolascon A,  
The N-terminal 11 amino acids of human erythrocyte band 3 are critical for aldolase binding and protein phosphorylation: implications for band 3 function.  
*Blood.* 2005 Aug 25;

- 83: Carta F, Demuro PP, Zanini C, Santona A, Castiglia D, D'Atri S, Ascierto PA, Napolitano M, Cossu A, Tadolini B, Turrini F, Manca A, Sini MC, Palmieri G, Rozzo AC; Italian Melanoma Intergroup. Analysis of candidate genes through a proteomics-based approach in primary cell lines from malignant melanomas and their metastases. *Melanoma Res.* 2005 Aug;15(4):235-44.
- 84: Roncada P, Cretich M, Fortin R, Agosti S, De Franceschi L, Greppi GF, Turrini F, Carta F, Turri S, Levi M, Chiari M. Acrylamide-agarose copolymers: improved resolution of high molecular mass proteins in two-dimensional gel electrophoresis. *Proteomics.* 2005 Jun;5(9):2331-9.
- 85: Arese P, Turrini F, Schwarzer E. Band 3/complement-mediated recognition and removal of normally senescent and pathological human erythrocytes. *Cell Physiol Biochem.* 2005;16(4-6):133-46. Review.
- 86 Giribaldi G, Procida S, Ulliers D, Mannu F, Volpatto R, Mandili G, Fanchini L, Bertetto O, Fronda G, Simula L, Rimini E, Cherchi G, Bonello L, Maule MM, Turrini F. Specific detection of cytokeratin 20-positive cells in blood of colorectal and breast cancer patients by a high sensitivity real-time reverse transcriptase-polymerase chain reaction method. *J Mol Diagn.* 2006 Feb;8(1):105-12.
- 87: Barbero G, Carta F, Giribaldi G, Mandili G, Crobu S, Ceruti C, Fontana D, Destefanis P, Turrini F. Protein/RNA coextraction and small two-dimensional polyacrylamide gel electrophoresis for proteomic/gene expression analysis of renal cancer biopsies. *Anal Biochem.* 2006 Feb 1;349(1):62-71. Epub 2005 Nov 2.
- 90: De Angelis M, Rizzello CG, Scala E, De Simone C, Farris GA, Turrini F, Gobbetti M. Probiotic preparation has the capacity to hydrolyze proteins responsible for wheat allergy. *J Food Prot.* 2007 Jan;70(1):135-44. PMID: 17265872 [PubMed - indexed for MEDLINE]
- 91: Zanini C, Giribaldi G, Mandili G, Carta F, Crescenzi N, Bisaro B, Doria A, Foglia L, di Montezemolo LC, Timeus F, Turrini F. Inhibition of heat shock proteins (HSP) expression by quercetin and differential doxorubicin sensitization in neuroblastoma and Ewing's sarcoma cell lines. *J Neurochem.* 2007 Nov;103(4):1344-54. Epub 2007 Aug 6.
- 92: De Franceschi L, Biondani A, Carta F, Turrini F, Laudanna C, Deana R, Brunati AM, Turretta L, Iolascon A, Perrotta S, Elson A, Bulato C, Brugnara C. PTepsilon has a critical role in signaling transduction pathways and phosphoprotein network topology in red cells. *Proteomics.* 2008 Nov;8(22):4695-708.
- 93: Pantaleo A, Giribaldi G, Mannu F, Arese P, Turrini F. Naturally occurring anti-band 3 antibodies and red blood cell removal under physiological and pathological conditions. *Autoimmun Rev.* 2008 Jun;7(6):457-62.
- 94: Barbero G, Destefanis P, Procida S, Mandili G, Ulliers D, Ceruti C, Fiori C, Maule MM, Fontana D, Giribaldi G, Turrini F. Highly specific detection of prostate-specific antigen-positive cells in the blood of patients with prostate cancer or benign prostatic hyperplasia, using a real-time reverse-transcription-polymerase chain reaction method with improved sensitivity. *BJU Int.* 2008 Dec;102(11):1566-72.

95: Zanini C, Pulerà F, Carta F, Giribaldi G, Mandili G, Maule MM, Forni M, Turrini F.

Proteomic identification of heat shock protein 27 as a differentiation and prognostic marker in neuroblastoma but not in Ewing's sarcoma.  
Virchows Arch. 2008 Feb;452(2):157-67.

96 Andrea Biondani<sup>1</sup>, Franco Turrini<sup>2</sup>, Franco Carta<sup>3</sup>, Alessandro Matté<sup>1</sup>, Alida Filippini<sup>1</sup>, Angela Siciliano<sup>1</sup>, Yves Beuzard<sup>4</sup>, Lucia De Franceschi,<sup>1</sup>  
Heat-shock protein-27, -70 and peroxiredoxin-II show molecular chaperone function in sickle red cells: Evidence from transgenic sickle cell mouse model  
Proteomics- Clinical applications 2008 May (2) 706-719

97 Lepedda AJ, Cigliano A, Cherchi GM, Spirito R, Maggioni M, Carta F, Turrini F, Edelstein C, Scanu AM, Formato M.

A proteomic approach to differentiate histologically classified stable and unstable plaques from human carotid arteries.  
Atherosclerosis. 2008 Jul 12

98 Pantaleo A, Ferru E, Giribaldi G, Mannu F, Carta F, Mattè A, De Franceschi L, Turrini F.

Oxidized and poorly glycosylated band 3 is selectively phosphorylated by Syk kinase to form large membrane clusters in normal and G6PD-deficient red cells.  
Biochem J. 2008 Oct 22. [Epub ahead of print]