Education/Occupation:

1985:
Degree in Biology at the University of Ferrara.

From 1988 to 1990:
Fellowship from Banca Popolare di Verona, to perform an experimental work at the Istitute of Biochemistry of University of Verona

1991-now:
Permanent position as Laboratory Technician, Institute of Biochemistry, University of Verona.

1992:
Fellowship from National Cancer Center, Tokyo

Current main scientific interests:

- Effect of down-modulation of NO production in animal model of inflammatory pathologies in which STAT1/3 are hyperactivated
- Identification of phytocompounds modulating JAK/STAT pathway and study of their molecular mechanism of action.
- Molecular mechanism of specific cytotoxic action of alfa-bisabolol towards malignant tumour cells
- Molecular mechanism of cytotoxic activity of anti-STAT3 sesquiterpenes towards malignant tumour cells

Publications

1. Menegazzi M., **Carcereri de Prati A.**, Ledda-Columbano G.M., Columbano A., Uchida K., Miwa M. and Suzuki H.
Regulation of poly(ADP-ribose) polymerase mRNA levels during compensatory and mitogen induced growth of rat liver.
Archives of Biochemistry and Biophysics 279, 232-236, 1990 (I.F. 2,657).

2. Cesarone C.F., Scarabelli L., Scovassi A.I., Izzo R., Menegazzi M.**, Carcereri de Prati A.**, Orunesu M. and Bertazzoni U.
Changes in activity and mRNA levels of poly(ADP-ribose) polymerase during rat liver regeneration.
Biochimica et Biophysica Acta 1087, 241-246, 1990 (I.F. 2.045).

3. Berton G., Sorio C., Laudanna C., Menegazzi M., **Carcereri de Prati A.** and Suzuki H.
Activation of human monocyte-derived macrophages by interferon-gamma is accompanied by increase of poly(ADP-ribose) polymerase activity.
Biochimica et Biophysica Acta 1091, 101-109, 1991 (I.F. 3,482).

4. Menegazzi M.**,** Grassi-Zucconi G., **Carcereri de Prati A.**, Ogura T., Poltronieri P., Nyunoya H., Shiratori-Nyunoya Y., Miwa M., Suzuki H.

Differential expression of poly(ADP-ribose) polymerase and DNA polymerase ß in rat tissues.
Experimental Cell Research 197, 66-74, 1991 (I.F. 4,007).

5. Suzuki H**., Menegazzi M**., **Carcereri de Prati A.**, Ogura T., Esumi H., Matsukage A. and Libonati M.
Induction of DNA polymerase ß during proliferation of mitogen-stimulated human lymphocytes.
Biochemical and Biophysical Research Communications 181, 623-628, 1991 (I.F. 2,904).

6. Armato U., Testolin L., Menegazzi M., Menapace L., Ribecco M., **Carcereri de Prati A.**, Miwa M. and Suzuki H.
The exposure of carcinogen-initiated primary neonatal rat hepatocytes to tumor promoter modulates both the transcripts and the enzymatic activity of nuclear poly(ADP-ribose) polymerase.
Biochemical and Biophysical Research Communications 182, 1066-1074, 1992 (I.F. 2,904).

7. Menegazzi M., Suzuki H., **Carcereri de Prati A.**, Tommasi M., Miwa M., Gandini G. and Gerosa F.
Increase of poly(ADP-ribose) polymerase mRNA levels during TPA-induced differentiation of human lymphocytes.
FEBS letters 297, 59-62, 1992 (I.F. 3,912).

8. Menegazzi M**., Carcereri de Prati A.**, Miwa M, Suzuki H. and Libonati M.
Regulation of poly(ADP-ribose) polymerase gene expression in mitogen-stimulated human peripheral blood mononuclear cells.
Biochemistry International 26, 69-77, 1992 (I.F. 0,961).

9. Menegazzi M., **Carcereri de Prati A.**, Ogura T., Columbano A., Ledda-Columbano G.M., Libonati M., Esumi H. and Suzuki H.
Involvement of DNA polymerase ß in proliferation of rat liver induced by lead nitrate or by partial hepatectomy.
FEBS Letters 310, 135-138, 1992 (I.F. 3,912).

10. Grassilli E., **Carcereri de Prati A**., Monti D., Troiano L**.,** Menegazzi M**.,** Barbieri D., Franceschi C. and Suzuki H.
Studies of the relationship between cell proliferation and cell death: expression of nuclear oncogenes during concanavalin A-induced proliferation or dexamethasone-induced apoptosis of rat thymocytes.
Biochemical and Biophysical Research Communications 188, 1261-1266, 1992 (I.F. 2,904).

11. Zucconi-Grassi G., **Carcereri de Prati A**., Menegazzi M**.,** Cosi C. and Suzuki H.
DNA repair enzymes in the brain: DNA polymerase ß and poly(ADP-ribose) polymerase.
Annals of the New York Academy of Sciences 663, 432-435, 1992 (I.F. 1,789).

12. Coni P., Simbula G., **Carcereri de Prati A**., Menegazzi M., Suzuki H., Sarma D., Ledda-Columbano G.M. and Columbano A.
Mitogen-induced liver growth and compensatory regeneration exhibit a different pattern of *c-fos*, *c-jun* and *c-myc* mRNA expression.
Hepatology 17, 1109-1116, 1993 (I.F. 10.416).

13. Armato U., Wu J., Menegazzi M**.,** Menapace L., Ribecco M., Testolin L., **Carcereri de Prati A.** and Suzuki H.
The *in utero* initiation with DMN alters the complement of cytosolic glutathione S-transferases and the phenobarbital-induced expression of *c-jun* and *c-myc* oncogenes in primary neonatal rat hepatocytes.
Cytotechnology 11, S18-20, 1993 (I.F.0,438)..

14. Grassi-Zucconi G., Menegazzi M**., Carcereri De Prati A.**, Bassetti A., Montagnese P., Mandile P., Cosi C. and Bentivoglio M.
c-fos mRNA is spontaneously induced in the rat brain during the activity period of the circadian cycle.
European Journal of Neuroscience 5, 1071-1078, 1993 (I.F. 3,820).

15. Grassi-Zucconi G., Menegazzi M**., Carcereri de Prati A**., Vescia S. and Bentivoglio M.
Different programs of gene expression are associated with different phases of the 24 hrs and sleep-wake cycles.
Chronobiologia 21, 93-97, 1994 (I.F. 0,438).

16. Masutani M., Nozaki T., Hitomi H., Ikejima M., Nagasaki K., **de Prati AC**, Kurata S., Natori S., Sugimura T., Esumi H.
Cloning and functional expression of poly(ADP-ribose) polymerase cDNA from Sarcophaga peregrina.
Eur J Biochem. 1994 Mar 1;220(2):607-14.

17. Menegazzi M**., Carcereri de Prati A.** and Grassi-Zucconi G.
Differential expression pattern of j*un B a*nd *c-jun* in the rat brain during the 24-h cycle.
Neuroscience Letters 182, 295-298, 1994 (I.F. 2,019).

18. Armato U., Menegazzi M., Guerriero C., Cardinale C., **Carcereri de Prati A.**, Tognana E., Musajo F. and Suzuki H.
Induction of nitric oxide synthase gene expression by phorbol myristate acetate in primary neonatal hepatocytes.
Journal Experimental Clinical Cancer Research 14, 126-127, 1995 (I.F. 0,607).

19. Mariotto S., Menegazzi M., **Carcereri de Prati A.**, Cuzzolin L., Adami A., Suzuki H., and Benoni G.
Protective effect of nitric oxide on the gastric lesions and inhibition of the expression of gastric inducible nitric oxide synthase by flurbiprofen, and its nitro-derivative, nitroflurbiprofen.
British Journal Pharmacology 116, 1713-1714, 1995 (I.F. 3,325).

20. Suzuki H., Menegazzi M., **Carcereri de Prati A**., Mariotto S. and Armato U.
Nitric oxide in the liver: physiopathological roles.
Advances in Neuroimmunology 5, 379-410, 1995 (I.F. 2.433).

21. Menegazzi M.,Guerriero C., **Carcereri de Prati A**., Cardinale C., Suzuki H and Armato U.
TPA and cycloheximide modulate the activation of NF-κB and the induction and stability of nitric oxide synthase transcript in primary neonatal rat hepatocytes.
FEBS Letters 379, 279-285, 1996 (I.F. 3,912).

22. Ennas MG., Suzuki H., Menegazzi M., **Carcereri A**., Hanaoka F., Gremo F., Nieddu M. and Mezzanotte R.
On the presence of DNA polymerase α in human lymphocyte nuclei and chromosomes.
Heredity 77, 186-191, 1996 (I.F. 2,016).

23. Menegazzi M., **Carcereri de Prati A**., Suzuki H., Shinozuka H., Pibiri M., Piga R., Columbano A. Ledda-Columbano G.M.
Liver cell proliferation induced by nafenopin and cyprotenone acetate is not associated with increases in activation of transcription factors NF-κB and AP-1 or with expression of tumor necrosis factor-α.

Hepatology 25, 585-592, 1997 (I.F. 10.416).

24. Adami A., Crivellente F., **Carcereri de Prati A.**, Cavalieri E., Cuzzolin L., Tommasi M., Suzuki H. and Benoni G.
Biotransformation and cytotoxic properties of NO-donors on MCF-7 and U251 cell lines.
Life Sciences 63, 2097-2105, 1998

25. Menegazzi M., Scarpa A., **Carcereri de Prati A**., Menestrina F., and Suzuki H.
Correlation of poly (ADP-ribose) polymerase and p53 expression levels in high-grade lymphomas.
Molecular Carcinogenesis 25, 256-261, 1999 (I.F. 3,000).

26. Cosi C., Cavalieri E., **Carcereri de Prati A**., Marien M. and Suzuki H.
Effects of kainic acid lesioning on poly(ADP-ribose) polymerase (PARP) activity in the rat striatum *in vivo*.
Amino Acids 19:229-237, 2000

27. Menegazzi M., Tedeschi E., Dussin D., **Carcereri A.**, Cavalieri E., Mariotto S., and Suzuki H.
Anti interferon-γ action of epigallocatechin-3-galllate by specific inhibition of STAT-1 activation
FASEB Journal 10.1096/fj.00-0519fje, March 12, 2001 (I.F. 6,820).

28. Cavalieri E, Mariotto S, Fabrizi C, **de Prati AC**, Gottardo R, Leone S, Berra LV, Lauro GM, Ciampa AR, Suzuki H. alpha-Bisabolol, a nontoxic natural compound, strongly induces apoptosis in glioma cells.
Biochem Biophys Res Commun. 2004 Mar 12;315(3):589-94.

29. Mariotto S., Cavalieri E., Amelio E., Ciampa AR., **de Prati AC**, Marlinghaus E., Russo S., Suzuki H. Extracorporeal shock waves: from lithotripsy to anti-inflammatory action by NO production.
Nitric Oxide. 2005 Mar;12(2):89-96.

30. Ciampa AR, **de Prati AC**, Amelio E., Cavalieri E., Persichini T., Colasanti M., Musci G., Marlinghaus E., Suzuki H., Mariotto S.
Nitric oxide mediates anti-inflammatory action of extracorporeal shock waves**.**
FEBS Lett. 2005 Dec 19;579(30):6839-45.

31. **Carcereri de Prati A.**, Ciampa AR., Cavalieri E., Zaffini R., Darra E., Menegazzi M., Suzuki H., Mariotto S.
STAT1 as a new molecular target of anti-inflammatory treatment.
Current Medical Chemistry. 12:1819-28, 2005.

32. Berra LV, **Carcereri De Prati A**, Suzuki H, Pasqualin A."
The role of constitutive and inducible nitric oxide synthase in the human brain after subarachnoid hemorrhage.
J Neurosurg Sci. 2007; 51(1):1-9

33. Mariotto, S., Ciampa, A., **Carcereri de Prati, A**., Darra, E., Vincenti, S., Sega, M., Cavalieri E., Shoji K., and Suzuki H. "Aqueous extract of Arbutus unedo L. inhibits of STAT 1 activation in human breast cancer cell line MDA-MB231 and human fibroblast through SHP2 activation"
Medicinal Chemistry 2008; 4(3): 219-28

34. Mariotto, S., Esposito E., Di Paola R., Ciampa, A.R., Mazzon, E., **Carcereri de Prati, A**., Darra, E., Vincenzi, S., Cucinotta, G., Caminiti, R., Suzuki. H. and Cuzzocrea S.
Protective effect of Arbutus unedo aqueos extract in carragenan-induced lung inflammation in mice.
Pharmacological Research. 2008; 57(2):110-24.

35. Scarabelli TM, Mariotto S, Abdel-Azeim S, Shoji K, Darra E, Stephanou A, Chen-Scarabelli C, Marechal JD, Knight R, Ciampa A, Saravolatz L, **de Prati AC**, Yuan Z, Cavalieri E, Menegazzi M, Latchman D, Pizza C, Perahia D, Suzuki H.
Targeting STAT1 by myricetin and delphinidin provides efficient protection of the heart from ischemia/reperfusion-induced injury.
FEBS Lett. 2009; 583(3):531-41. Epub 2008 Dec 29

36. Mariotto S, **de Prati AC**, Cavalieri E, Amelio E, Marlinghaus E, Suzuki H.
Extracorporeal shock wave therapy in inflammatory diseases: molecular mechanism that triggers anti-inflammatory action.
Curr Med Chem. 2009;16(19):2366-72. Review

37. Darra E, Rungatscher A, **Carcereri de Prati A**, Podesser BK, Faggian G, Scarabelli T, Mazzucco A, Hallström S, Suzuki H.
Dual modulation of nitric oxide production in the heart during ischaemia/reperfusion injury and inflammation.
Thromb Haemost. 2010; 104(2):200-6. Epub 2010 May 27

38. Cavalieri E, Rigo A, Bonifacio M, **Carcereri de Prati A**, Guardalben E, Bergamini C, Fato R, Pizzolo G, Suzuki H, Vinante F.
Pro-apoptotic activity of α-bisabolol in preclinical models of primary human acute leukemia cells.
J Transl Med. 2011; 21 (9):45

39. Butturini E, Cavalieri E, **de Prati AC**, Darra E, Rigo A, Shoji K, Murayama N, Yamazaki H, Watanabe Y, Suzuki H, Mariotto S.
Two naturally occurring terpenes, dehydrocostuslactone and costunolide, decrease intracellular GSH content and inhibit STAT3 activation.
PLoS One. 2011; 6:e20174. Epub

40. Saturnino C; Palladino C; Napoli M; Sinicropi MS; Botta A; Sala M; **Carcereri de Prati A**; Novellino E; Suzuki H.
Synthesis and biological evaluation of new N-alkylcarbazole derivatives as STAT3 inhibitors: preliminary study
Eur J Med Chem. 2013; 60:112-9. doi: 10.1016/j.ejmech.2012.11.004. Epub 2012 Dec 4.

41. Butturini E, **Carcereri de Prati A**, Chiavegato G, Rigo A, Cavalieri E, Darra E, Mariotto S.
Mild oxidative stress induces S-glutathionylation of STAT3 and enhances chemosensitivity of tumoural cells to chemotherapeutic drugs.
Free Radic Biol Med. 2013; 65:1322-30. doi: 10.1016/j.freeradbiomed.2013.09.015. Epub 2013 Oct 1.