

MARIA LUISA BARBACCIA

Posizione attuale: professore ordinario di Farmacologia- Dipartimento di Medicina dei Sistemi- Facoltà di Medicina e Chirurgia, Università degli Studi di Roma "Tor Vergata"

FORMAZIONE:

Novembre 1979

Laurea in Medicina e Chirurgia, 110/110 con lode, presso L'Università degli Studi di Milano

IMPIEGO:

Novembre 1980-Gennaio 1984

"Fogarty Fellow", Laboratory of Preclinical Pharmacology, N.I.M.H., St. Elizabeth's Hospital, Washington D.C., U.S.A.

Febbraio 1984-Agosto 1985

"Guest Researcher", Laboratory of Preclinical Pharmacology, N.I.M.H., St. Elizabeth's Hospital, Washington D.C., U.S.A.

Aprile 1984

Vincitrice di concorso pubblico, per titoli ed esami, per un posto di Ricercatore Universitario (gruppo disciplinare n. 70, sottosettore n. 1-Farmacologia), Università degli Studi dell'Aquila, Facoltà di Medicina e Chirurgia

Dicembre 1985-Marzo 1988

"Research Assistant Professor", Georgetown University Medical School, Dept. of Pharmacology, Washington D.C., USA

Aprile 1988-Ottobre 1991

Professore Associato di Chemioterapia, Dipartimento di Medicina Sperimentale e Scienze Biochimiche, Facoltà di Medicina e Chirurgia Università di Roma, "Tor Vergata"

Novembre 1991-Febbraio 2002

Professore Associato di Farmacologia, Facoltà di Medicina e Chirurgia Università di Roma "Tor Vergata", Roma, dal 1998 afferente al Dipartimento di Neuroscienze

Marzo 2002-Febbraio 2005

Professore Straordinario di Farmacologia, Facoltà di Medicina e Chirurgia Università di Roma "Tor Vergata", Roma

Marzo 2005-presente

Professore Ordinario di Farmacologia, Facoltà di Medicina e Chirurgia Università di Roma "Tor Vergata", Roma

ALTRE ATTIVITÀ

Giugno 2006-presente

Componente Comitato Etico Indipendente- Azienda Policlinico Tor Vergata

Febbraio 2009- presente

Componente Comitato Etico ACISMOM – Ospedale S.Giovanni Battista-Roma

Settembre 2011-presente

Componente Comitato Etico Ospedale Pediatrico Bambin Gesù-Roma

A.A. 2010-2011

Membro Commissione giudicatrice dei titoli per la conferma in ruolo dei Ricercatori Universitari (prot. N. 637 del 12-02-2010, MIUR)

A.A. 2010-2011

Direttore del Master di II livello in "Politiche del Farmaco"- Università degli Studi di Roma Tor Vergata

Febbraio 2011

Membro di commissione di concorso per un posto di ricercatore universitario SSD BIO/14 (D.R. nomina n. 147 del 28/01/2011 pubblicato su G.U n. 12 del 11/02/2011)

È membro della Giunta del Dipartimento in Medicina dei Sistemi e della Giunta della Facoltà di Medicina e Chirurgia.

AFFILIAZIONI

- Società Italiana di Neuroscienze
- Società italiana di Farmacologia
- Federation of European Neuroscience Societies
- American Society for Neuroscience
- International Brain Research Organization (IBRO)

E' membro dell'Editorial Advisory Board della rivista Current Neuropharmacology (dal 2008).

E' stata "referee ad hoc" per riviste scientifiche internazionali, tra cui: Acta Psychiatrica Scandinavica, Alcohol & Alcoholism, Brain Research, Depression and Anxiety, Endocrinology, European Journal of Neuroscience, European Neuropsychopharmacology, Expert Reviews on Neurotherapeutics, Journal of Neurochemistry, Journal of Neuroendocrinology, Journal of Pharmacy and Pharmacology, Neurochemistry International, Neurochemical Research, Neuropsychopharmacology, Pharmacology Biochemistry & Behavior, Proceedings of the National Academy of Sciences (USA), Psychoneuroendocrinology, Stress. E' stata referee nella valutazione di progetti di ricerca PRIN (2004) e per conto del Danish Medical Research Council (2006).

Ha valutato prodotti della ricerca, su richiesta del Panel 05-Biology del CIVR (2005).

ATTIVITÀ SCIENTIFICA

Maria Luisa Barbaccia ha svolto la sua attività di ricerca presso l'Istituto di Farmacologia dell'Università degli Studi di Brescia e Milano (1977-80), il Laboratorio di Farmacologia Preclinica del National Institute of Mental Health (N.I.M.H.) Washington D.C.-USA (1980-85) e la Georgetown University, Washington, D.C.-USA (1985-88). Al rientro dagli Stati Uniti, nel 1988, ha preso servizio con la qualifica di professore associato di Chemioterapia presso la Facoltà di Medicina e Chirurgia dell'Università di Roma "Tor Vergata". Presso questa Università ha organizzato e dirige il Laboratorio di Neuropsicofarmacologia.

Le ricerche di Maria Luisa Barbaccia, i cui risultati sono documentati da più di 80 pubblicazioni per la maggior parte su riviste internazionali, hanno avuto come oggetto di studio i meccanismi con cui farmaci psicotropi e sostanze d'abuso interagiscono con i sistemi monoaminergici e GABAergico nel sistema nervoso centrale. In particolare, negli anni più recenti si è occupata dei neurosteroidi, steroidi prodotti dal sistema nervoso centrale ed in grado d'influenzare attraverso molteplici meccanismi alcune importanti funzioni cerebrali, della loro modulazione da parte di farmaci, sostanze d'abuso e stress, nonché del possibile ruolo dei neurosteroidi nel processo di differenziamento neuronale.

PUBBLICAZIONI

1. Reggiani A., **Barbaccia M.L.**, Spano P.F. and Trabucchi M. Acute and chronic ethanol administration on specific ³H-GABA binding in different rat brain areas. *Psychopharmacology*, 67: 261-264, 1980
2. Reggiani A., **Barbaccia M.L.**, Spano P.F. and Trabucchi M. Dopamine metabolism and receptor function after acute and chronic ethanol. *Journal of Neurochemistry*, 35: 34-37, 1980

3. Reggiani A., **Barbaccia M.L.**, Spano P.F. and Trabucchi M. Role of dopaminergic-enkephalinergic interactions in the neurochemical effects of ethanol. *Substance and Alcohol Actions/Misuse*, 1: 151-158, 1980
4. **Barbaccia M.L.**, Reggiani A., Spano P.F. and Trabucchi M. Ethanol effects on dopaminergic function: modulation by the endogenous opioid system. *Pharmacology, Biochemistry and Behaviour*, 13 (S.1): 303-306, 1980
5. **Barbaccia M.L.**, and Trabucchi M. Tardive dyskinesia: A biological approach. In (Battistin L., Hashim G.A. and Lajtha A., eds.): *Neurochemistry and Clinical Neurology*. Prog. Clin. Biol. Res. vol. 39, pp. 181-193, Raven Press, New York, N.Y., 1980
6. **Barbaccia M.L.**, Reggiani A., Spano P.F. and Trabucchi M. Ethanol induced changes of dopaminergic function in three strains of mice characterized by a different population of opiate receptors. *Psychopharmacology*, (Berlin) 74:260-262, 1981
7. Chuang D.-M., Farber L., **Barbaccia M.L.** and Costa E. Mechanism of the internalization of beta-adrenergic receptor recognition sites. In (Usdin E., Weiner N. and Youdim M.B. eds.): *Function and Regulation of Monoamine Enzymes: Basic and Clinical Aspects*. London, MacMillan Publishers, Ltd., pp. 809-815, 1981
8. Spano P.F., **Barbaccia M.L.**, Covelli V. and Trabucchi M. La benzodiazepina: uno strumento per studiare la biologia dell'ansia. In: *Nuove benzodiazepine: aspetti strutturali, farmacodinamici e farmacocinetici*. Trieste University Press, pp. 29-36, 1981
9. **Barbaccia M.L.**, Bosio A., Spano P.F. and Trabucchi M. Ethanol metabolism and striatal dopamine turnover. *Journal of Neural Transmission*, 53: 169-177, 1982
10. **Barbaccia M.L.**, Reggiani A., Spano P.F. and Trabucchi M. Modulation of dopamine turnover in rat retina by opiates: effects of different pharmacological treatments. *Pharmacological Research Communications*, 14: 541-550, 1982
11. **Barbaccia M.L.**, Bosio A., Lucchi L., Spano P.F. and Trabucchi M. Neuronal mechanisms regulating the ethanol effects on the dopaminergic system. *Life Sciences*, 30: 2163-2170, 1982
12. Brunello N., **Barbaccia M.L.**, Chuang D.-M. and Costa E. Downregulation of beta-adrenergic receptors following repeated injections of desmethylimipramine: Permissive role of serotonergic axons. *Neuropharmacology*, 21: 1145-1149, 1982
13. **Barbaccia M.L.**, Chuang D.-M and Costa E. Is insulin a neuromodulator? In (Trabucchi M. and Costa E. eds.): *Regulatory peptides: functional and pharmacological aspects*. Advances in Biochemical Psychopharmacology, pp: 511-518, Raven Press, New York, 1982
14. **Barbaccia M.L.**, Brunello N., Chuang D.-M. and Costa E. On the mode of action of imipramine: relationship between serotonergic axon terminal function and down-regulation of β -adrenergic receptors. *Neuropharmacology*, 22: 373-383, 1983.
15. Zsilla G., **Barbaccia M.L.**, Gandolfi O., Knoll J. and Costa E. (-) Deprenyl a selective MAO "B" inhibitor increases ^3H -imipramine binding and decreases beta-adrenergic receptor function. *European Journal of Pharmacology*, 89: 111-117, 1983
16. **Barbaccia M.L.**, Brunello N., Chuang D.-M. and Costa E. Serotonin-elicited amplification of adenylate cyclase activity in hippocampal membranes from adult rat. *Journal of Neurochemistry*, 40: 1671-1679, 1983
17. **Barbaccia M.L.**, Gandolfi O., Chuang D.-M- and Costa E. Differences in the regulatory adaptation of the 5HT_2 recognition sites labelled by ^3H -mianserin or ^3H -ketanserin. *Neuropharmacology*, 22: 123-126, 1983
18. **Barbaccia M.L.**, Chuang D.-M., Gandolfi O. and Costa E. Transynaptic mechanisms in the action of imipramine. In (Usdin, E., Goldstein M., Friedhoff A.J. and Georgotas A., eds.): *Frontiers in Neuropsychiatric Research*. London, MacMillan Press, pp. 19-31, 1983

19. **Barbaccia M.L.**, Gandolfi O., Chuang D.-M. and Costa E. Modulation of neuronal serotonin uptake by a putative endogenous ligand of imipramine recognition sites. *Proceedings National Academy of Sciences (USA)* 80: 5134- 5138, 1983
20. Gandolfi O., **Barbaccia M.L.**, Chuang D.-M. and Costa E. Daily bupropion injections for 3 weeks attenuate the NE-stimulation of adenylate cyclase and the number of beta- adrenergic recognition sites in rat frontal cortex. *Neuropharmacology*, 22: 927-929, 1983
21. Costa E., Chuang D.-M., **Barbaccia M.L.** and Gandolfi O. Molecular mechanisms in the action of imipramine. *Experientia*, 39: 855-858, 1983
22. **Barbaccia M.L.** and Costa E. Autacoids for drug receptors: A new approach in drug development. *Annals New York Academy of Sciences*, 430: 103-114, 1984
23. **Barbaccia M.L.**, Karoum F., Gandolfi O., Chuang D.-M. and Costa E. Putative endogenous ligands for antidepressant recognition sites. *Clinical Neuropharmacology*, 9 (Suppl 1): 308-309, 1984
24. Zsilla G., Held GY. Szekely A.M., Knoll J., **Barbaccia M.L.**, Cheney D.L., Gandolfi O. and Costa E. Modification of synaptic receptor function by (-)Deprenyl. *Clinical Neuropharmacology*, 9 (Suppl. 1): 312-313, 1984
25. Gandolfi O., **Barbaccia M.L.** and Costa E. Comparison of iprindole, imipramine and mianserin action on brain serotonergic and beta-adrenergic receptors. *Journal of Pharmacology and Experimental Therapeutics*, 229: 782-786, 1984
26. Gandolfi O., **Barbaccia M.L.** and Costa E. The (-) deprenyl actions on beta-adrenergic receptors require the integrity of brain serotonergic axon terminals. *European Journal of Pharmacology*, 100: 233-237, 1984
27. Lucchi L., Rius R.A., **Barbaccia M.L.**, Spano P.F. and Trabucchi M. Regulation of adenylate cyclase and chronic ethanol treatment in the rat. In: Catecholamines Neuropharmacology and central nervous system. Theoretical aspects, Alan R. Liss, Inc., New York, 1-150, 1984
28. Costa E., **Barbaccia M.L.**, Gandolfi O. and Chuang D.-M. Endogenous modulation of serotonin uptake as a site for the action of imipramine. In (Biggio G., Spano P.F., Toffano G. and Gessa G.L., eds.): Neuromodulation and brain function. Pergamon Press, Oxford, U.K., pp. 31-40, 1984
29. Chuang D.-M., **Barbaccia M.L.**, Brunello N. and Kinnier W.J. Receptor Regulation: an overview. In (Hanin, I., ed.): Dynamics of neurotransmitter function. Raven Press, New York, pp. 281-292, 1984
30. Gandolfi O., **Barbaccia M.L.** and Costa E. Different effects of serotonin antagonists on ³H-mianserin and ³H-ketanserin recognition sites. *Life Sciences*, 36: 713-721, 1985
31. Ravizza L., Nicoletti F., Pozzi O. and **Barbaccia M.L.** Repeated daily treatments with estradiol benzoate increase the ³H-imipramine binding in male rat frontal cortex. *European Journal of Pharmacology*, 107: 395-396, 1985
32. **Barbaccia M.L.**, Karoum F. and Costa E. Characterization of the endocoid for imipramine recognition sites. In (Lal. H., La Bella F. and Lane S., eds.): Endocoids. Alan R. Liss, Inc., New York, pp. 431-440, 1985
33. Costa E. and **Barbaccia M.L.** Regulation of serotonin (5HT) uptake: Endocoid modulators and the action of imipramine. In (Sir William Paton, James Mitchell and Paul Turner eds): IUPHAR 9th International Congress of Pharmacology, vol. 3, pp. 109-116, Mac Millan Press, 1985
34. **Barbaccia M.L.**, Melloni P., Pozzi O., Costa E. ³H- imipramine displacement and 5HT uptake inhibition by tryptoline derivatives: in rat brain 5-methoxytryptoline is not the autacoid for ³H-imipramine recognition sites. *European Journal of Pharmacology*, 123: 45-52, 1986
35. Nicoletti F., **Barbaccia M.L.**, Iadarola M., Pozzi O., Laird H.E. III Abnormality of alpha₁-adrenergic receptors in the frontal cortex of epileptic rats. *Journal of Neurochemistry* 46: 270-273, 1986

36. **Barbaccia M.L.**, Ravizza L. and Costa E. Maprotiline: an antidepressant with an unusual pharmacological profile. *Journal of Pharmacology and Experimental Therapeutics*, 236 (2): 307-312, 1986
37. **Barbaccia M.L.**, Costa E., Ferrero P., Guidotti A., Roy A., Sunderland T., Pickar D., Paul S.M. and Goodwin F.K. Diazepam binding inhibitor. A brain neuropeptide present in human spinal fluid: studies in depression, schizophrenia and Alzheimer's disease. *Archives of General Psychiatry*, 43: 1143-1147, 1986
38. **Barbaccia M.L.** and Costa E. Endogenous ligands for the ³H- imipramine and ³H-ketanserin recognition sites. *Clinical Neuropharmacology*, 9(4): 233-235, 1986
39. Costa E., Ravizza L., **Barbaccia M.L.** Evaluation of current theories on the mode of action of antidepressants. In: GABA and Mood Disorders. Experimental and Clinical research, L.E.R.S.. Monographs, vol. 4, pp. 9-21, 1986
40. Szekely A.M., **Barbaccia M.L.** and Costa E. Activation of specific glutamate receptor subtypes increases c-fos protooncogene expression in primary cultures of neonatal rat cerebellar granule cells. *Neuropharmacology*, 26(12): 1779-1782, 1987
41. Szekely A.M., **Barbaccia M.L.** and Costa E. Effect of a protracted antidepressant treatment on signal transduction and ³H-(-)-Baclofen binding at GABA_B receptors. *Journal of Pharmacology and Experimental Therapeutics*, 243 (1): 155- 159, 1987
42. **Barbaccia M.L.**, Guidotti A. and Costa E. Endogenous ligands for high affinity recognition sites of psychotropic drugs. *Annual Reviews of Pharmacology and Toxicology*, 28: 451-476, 1988
43. Roy A., Adinoff B., Roehrich L., Lamparski D., Custer R., Lorenz V., **Barbaccia M.L.**, Guidotti A., Costa E. and Linnoila M. Pathological gambling. A psychobiological study. *Archives of General Psychiatry*, 45: 369-373, 1988
44. Guidotti A., **Barbaccia M.L.** and Costa E. Allosteric modulation of GABA receptors and symptoms of affective disorders. In: M. Briley, A. Fillion (eds.) New Concepts in Depression. London McMillan, pp. 340-350, 1988
45. **Barbaccia M.L.** and Costa E. Toward a better understanding of the regulation of serotonin (5HT) uptake. In: Perspectives in Psychopharmacology: A collection of papers in honor of Earl Usdin. Alan R. Liss, Inc., New York, pp. 333-349, 1988
46. Rothstein J.D, McKhann G., Guarneri P., **Barbaccia M.L.**, Guidotti A. and Costa E. Cerebro-spinal fluid content of Diazepam Binding Inhibitor in chronic hepatic encephalopathy. *Annals of Neurology*, 26 (1): 57-62, 1989
47. Szekely A.M., **Barbaccia M.L.**, Alho H. and Costa E. In primary cultures of cerebellar granule cells the activation of N-methyl-D-Aspartate-sensitive glutamate receptors induces c-fos mRNA expression. *Molecular Pharmacology*, 35:401-408, 1989
48. Roy A., Pickar D., Gold P., **Barbaccia M.L.**, Costa E., Guidotti A. and Linnoila M. CSF Diazepam Binding Inhibitor and Corticotropin-releasing hormone in cerebrospinal fluid. *Acta Psychiatrica Scandinavica*, 80: 287-291, 1989
49. **Barbaccia M.L.**, Guarneri P., Berkovich A., Wambebe C., Guidotti A. and Costa E. Studies on the endogenous modulator of GABA_A receptors in human brain and CSF. In: Barnard E.A. and Costa E. (eds.) "Allosteric modulation of aminoacid receptors; Therapeutic implications. Raven Press, Ltd., New York, pp. 125-138, 1989
50. **Barbaccia M.L.** and Costa E. The endogenous modulation of serotonergic transmission and its impact in psychiatric research. In: Costa E. (eds.) "Neurochemical Pharmacology 1988. A tribute to B.B. Brodie. Fidia Research Foundation Symposium Series, Raven Press, New York, N.Y., pp. 197-210, 1989
51. **Barbaccia M.L.** and Costa E. Meccanismi molecolari operativi nella memoria: nuove ipotesi. Fidia Biomedical Information, Anno 6 (7/8) pp. 3-7, 1989

52. Roy A., DeJong J., Adinoff B., **Barbaccia M.L.**, Costa E., Guidotti A. and Linnoila M. CSF Diazepam binding inhibitor in alcoholics and normal controls. *Psychiatry Research*, 31(3): 261-266, 1990
53. **Barbaccia M.L.**, Berkovich A., Guarneri P. and Slobodiansky E. DBI (Diazepam Binding Inhibitor): the precursor of a family of endogenous modulators of GABA_A receptor function. History, perspectives and clinical implications. *Neurochemical Research*, 5 (2): 161-168, 1990
54. **Barbaccia M.L.**, Wood P.L. and Costa E. Is there an endogenous modulation of serotonin uptake? In: Paoletti R., Vanhoutte P.L., Brunello N. and Maggi F. (eds.) "Serotonin. From cell biology to pharmacology and therapeutics". Kluwer Acad. Publisher, Dordrecht, NL, pp. 155-159, 1990
55. **Barbaccia M.L.** Genetica molecolare delle malattie mentali. *Neuroscienze*, Casa Editr. Argo, Roma, Vol. 8 (anno 2), p. 14-21, 1991
56. **Barbaccia M.L.** and Costa E. Le basi biochimiche della memoria In: Le molte facce della memoria C.L. Cazzullo, A. Guareschi-Cazzullo, G.A. Chiarenza (Eds.). Liviana Editrice - Padova pg. 3-18, 1991
57. **Barbaccia M.L.**, Roscetti G., Trabucchi M., Ambrosio C. and Massotti M. Cyclic AMP-dependent increase of steroidogenesis in brain cortical minces. *European Journal of Pharmacology*, 219:485,1992
58. Biggio, G., Cuccheddu, T., Floris, S., Sanna, E., **Barbaccia, M.L.**, Roscetti, G., Serra, M. and Concas A. Stress and GABAergic transmission in the rat brain: the effect of carbon dioxide inhalation. In: "Anxiety: Neurobiology, Clinic and Therapeutic Perspectives. (Eds.: M. Hamon, H. Ollat and M.H. Thiebot), John Libbey, vol.232,p.53-64,1993.
59. Roscetti, G. Ambrosio C., Trabucchi, M., Massotti, M. and **Barbaccia, M.L.** Modulatory mechanisms of cyclic AMP-stimulated steroid content in rat brain cortex. *European Journal of Pharmacology-Mol. Pharmacol. Sect.* 269:17-24 1994.
60. **Barbaccia, M.L.**, Roscetti, G., Trabucchi, M., Cuccheddu, T., Concas A. and Biggio, G. Neurosteroids in the brain of handling-habituated and naive rats: effect of CO₂ inhalation. *European Journal of Pharmacology*, 261:317-320, 1994.
61. **Barbaccia, M.L.**, Roscetti, G., Trabucchi, M., Mostallino M.C., Concas A., Purdy R.H. and Biggio G. Time-dependent changes in rat brain neuroactive steroid concentrations and GABA_A receptor function after acute stress. *Neuroendocrinology*, 63:166-172, 1996
62. **Barbaccia M.L.**, Roscetti G., Bolacchi F., Concas A., Mostallino M.C., Purdy R.H. and Biggio G. Stress induced increase in brain neuroactive steroids: antagonism by abecarnil. *Pharmacology Biochemistry & Behavior*, 54:205-210, 1996.
63. Concas A., Mostallino M.C., Perra C., Lener R., Roscetti G., **Barbaccia M.L.**, Purdy R.H. and Biggio G. Functional correlation between allopregnanolone and [³⁵S]-TBPS binding in the brain of rats exposed to isoniazid, pentylenetetrazol and stress. *British Journal of Pharmacology*, 118:839-846, 1996.
64. **Barbaccia M.L.**, Roscetti G., Trabucchi M., Purdy R.H., Mostallino M.C. Perra C., Concas A. and Biggio G. Isoniazid-induced inhibition of GABAergic transmission enhances neurosteroid content in the rat brain. *Neuropharmacology*, 35:1299-1305, 1996.
65. Biggio G., Concas A., Mostallino M.C. Purdy R. H., Trabucchi M. and **Barbaccia M.L.** Inhibition of GABAergic transmission enhances neurosteroid concentrations in the rat brain. In , A.Genazzani, F. Petraglia and R.H. Purdy (eds.) "The Brain: Source and Target of Sex Steroid Hormones", The Parthenon Publishing Group, New York-London, pp.43-62,1996.
66. **Barbaccia M.L.**, Roscetti G., Trabucchi M., Purdy R.H., Mostallino M.C., Concas A. and Biggio G. The effects of inhibitors of GABAergic transmission and stress on brain and plasma allopregnanolone concentrations. *British Journal of Pharmacology* 120:1582-1588,1997.

67. Roscetti G., Del Carmine R., Trabucchi M., Massotti M., Purdy R.H. and **Barbaccia M.L.** Modulation of neurosteroid synthesis/accumulation by L-ascorbic acid in rat brain tissue: inhibition by selected serotonin antagonists. *Journal of Neurochemistry*, 71:1108-1117, 1998.
68. Concas A., Mostallino M.C., Porcu P., Follesa P., **Barbaccia M.L.**, Trabucchi M., Purdy, R.H., Grisenti P. and Biggio G. Role of brain allopregnanolone in the plasticity of γ -aminobutyric acid type A receptor in rat brain during pregnancy and after delivery. *Proceedings of the National Academy of Science (USA)*, 95: 13284-13289, 1998.
69. **Barbaccia M.L.**, Concas A., Serra M. and Biggio G. Stress and neurosteroids in adult and aged rats. *Experimental Gerontology*, 33(7-8): 697-712, 1998.
70. Serra M., Madau P., Chessa M.F., Caddeo M., Sanna E., Trapani G., Franco M., Liso G., Purdy R. H., **Barbaccia M.L.** and Biggio G. 2-Phenyl-imidazo [1,2a]pyridine derivatives as ligands for peripheral benzodiazepine receptors: stimulation of neurosteroid synthesis and anticonflict action in rats. *British Journal of Pharmacology* 127: 177-187, 1999.
71. Concas A., Follesa P., **Barbaccia M.L.**, Purdy R.H. and Biggio G. Physiological modulation of GABA_A receptor plasticity by progesterone metabolites. *European Journal of Pharmacology*, 375:225-235, 1999.
72. **Barbaccia M.L.**, Affricano D., Trabucchi M., Purdy R.H., Colombo G., Agabio R. and Gessa G.L. Ethanol markedly increases "GABAergic" neurosteroids in alcohol-preferring rats. *European Journal of Pharmacology* 384, 1999.
73. **Barbaccia M.L.**, Lello S., Sidiropoulou T., Cocco T., Sorge R. P., Cocchiarale A., Piermarini V., Sabato A.F., Trabucchi M., and Romanini C. Plasma 5 α -androstane-3 α ,17 β -diol, an endogenous steroid that positively modulates GABA_A receptor function, and anxiety: a study in menopausal women. *Psychoneuroendocrinology* 25: 659-675, 2000
74. Ghezzi P., Di Santo E., Sacco S., Foddi C., **Barbaccia M.L.** and Mennini T. Neurosteroid levels are increased *in vivo* after LPS treatment and negatively regulate LPS-induced TNF production. *European Cytokine Network* 11(3):464-469, 2000
75. Biggio G., **Barbaccia M.L.**, Follesa P., Serra M., Purdy R.H., Concas A. Neurosteroids and GABA_A receptor plasticity. In "GABA in the Nervous System. The view of fifty years." (R.W. Olsen and Martin, Eds) Lippincott-Raven, New York, pp. 207-232, 2000
76. **Barbaccia M.L.**, Affricano D., Purdy R.H., Macciocco E., Spiga F. and Biggio G. Clozapine, but not haloperidol, increases brain neuroactive steroid concentrations in the rat. *Neuropsychopharmacology*, 25:489-497, 2001
77. **Barbaccia M.L.**, Serra M. and Biggio G. Stress and neuroactive steroids. *International Review in Neurobiology* 46: 243-272, 2001
78. **Barbaccia M.L.** and Sidiropoulou T. The brain, a putative source and target of DHEA. In "DHEA and BRAIN" (R. Morfin ed.) Nutrition, Brain and Behavior (series editor C. Prasad), Taylor & Francis, London and New York, 1:1-23, 2002
79. **Barbaccia M.L.**, Colombo G., Affricano D., Carai M.A.M., Vacca G., Melis S., Purdy R.H. and Gessa G.L.. GABA_B receptor-mediated increase of neurosteroids by γ -hydroxybutyric acid. *Neuropharmacology*, 42: 782-791, 2002
80. Maccarrone M., Valverde O., **Barbaccia M.L.**, Castane' A., Maldonado R., Ledent C., Parmentier M., Finazzi-Agro' A.. Age-related changes of anandamide metabolism in CB1 cannabinoid receptor knock out mice: correlation with behaviour. *European Journal of Neuroscience*, 15: 1178-1186, 2002
81. Albo F., **Barbaccia M.L.**, Cavazza A, Marini M. and Roda L.G. Dehydroepiandrosterone metabolism in human plasma. *Hormone and Metabolic Research* 35:104-108, 2003
82. **Barbaccia M.L.** Neurosteroidogenesis: relevance to neurosteroid actions in brain and modulation by psychotropic drugs. *Critical Reviews in Neurobiology*, 16(1-2):67-74, 2004.

83. **Barbaccia M.L.**, Carai M.A.M., Colombo G., Lobina C., Purdy R.H. and Gessa G.L. Endogenous γ -aminobutyric acid (GABA)_A receptor active neurosteroids and the sedative/hypnotic action of γ -hydroxybutyric acid (GHB): a study in GHB-S(sensitive) and GHB-R(resistant) rat lines. *Neuropharmacology*, 49: 48-58, 2005.
84. **Barbaccia M.L.**, Scaccianoce S., Del Bianco P., Campolongo P., Trezza V., Tattoli M, Cuomo V., Steardo L. Cognitive impairment and increased brain neurosteroids in adult rats perinatally exposed to low millimolar blood alcohol concentrations. *Psychoneuroendocrinology* 32: 931-942, 2007
85. Pistritto G, Papacleovoulou G., Ragone G., Di Cesare S., Papaleo V., Mason J. I., **Barbaccia M.L.** Differentiation-dependent progesterone synthesis and metabolism in NT2-N human neurons. *Experimental Neurology* 217: 302-311, 2009
86. Bortolato M, Devoto P, Roncada P, Frau R, Flore G, Saba P, Pistritto G, Soggiu S, Pisanu S, Zappalà A, Ristaldi S, Tattoli M, Cuomo V, Marrosu F, **Barbaccia ML.** Isolation rearing-induced reduction of 5 α -reductase expression: relevance to dopaminergic impairments. *Neuropharmacology*, doi:10.1016/j.Neuropharm.2011.01.13, 2011
87. **Barbaccia ML.** Much excitement about antidepressants, DBI and c-fos. *Pharmacol Res.* Oct;64(4):333-5. Epub 2011 Jun 6, 2011
88. Pistritto G., Papaleo V., Sanchez P., Ceci C., **Barbaccia ML.** Divergent modulation of neuronal differentiation by caspase-2 and -9. *PLoS One* 7(5):e36002. Epub 2012 May 18, 2012