



CURRICULUM VITAE

Flavio Moroni

Nato a Monteverdi Marittimo (Pisa) il 6/7/1943.

E' cittadino Italiano.

Professore Emerito di Farmacologia nell'Università di Firenze
già

Professore ordinario di Farmacologia

Primario SOD Tossicologia Medica, AOUC Careggi

E mail: flavio.moroni@unifi.it

Titoli di studio

1969: Laurea in Medicina e Chirurgia (massimo dei voti e lode).

1971: Specializzazione in Medicina Tossicologica (massimo dei voti e lode).

1972: Specializzazione in Anestesia (massimo dei voti e lode).

Curriculum Accademico

1970: Post-doctoral fellow, Regional Poisoning Treatment Center, The Royal Infirmary, Edinburgh

1971-82: Assistente Ordinario Istituto di Farmacologia e Tossicologia dell'Università di Firenze.

1971-76: Incaricato di Farmacologia nella Scuola di specializzazione in Anestesiologia e Rianimazione dell'Università di Firenze.

1971-76: Incaricato di Tossicologia sistematica nella scuola di specializzazione in Tossicologia medica 1978-87 dell'Università di Firenze.

1976-78: Visiting Associate, National Institute for Mental Health. Laboratory of Preclinical Pharmacology, N.I.M.H. Washington D.C. U.S.A.

1982-86: Professore Associato di Farmacologia nell'Università di Firenze.

1983-85: Professore supplente di Farmacologia nell'Università di Ferrara.

1986-88: Professore straordinario di Psicofarmacologia nell'Università di Firenze.

- 1988-89: Professore straordinario di Farmacologia, Facoltà di Medicina, Università di Firenze.
- 1993-2000 Ordinario di Farmacologia Cellulare, Facoltà Scienze Matematiche Fisiche e Naturali, Università di Firenze.
- 1989-2013 Professore ordinario di Farmacologia, Facoltà di Medicina, Università di Firenze.
- 2002-2013 Primario Unità Operativa di Tossicologia e Medicina delle Farmacotossicodipendenze; Azienda Ospedaliera-Universitaria, Careggi

Membro dell'Editorial Board delle seguenti riviste internazionali

J. Neurochemistry
NeuroReport
European J. Pharmacology
Neurochemical Research
Molecular Neuropharmacology

Referee per le seguenti riviste internazionali:

Science
Nature
Trends in Pharmacol. Sciences
Trends in Neurosciences
Neuroscience
J. Neuroscience
European J. Neuroscience
Neuropharmacology
Brain Research
Archiv. of Pharmacology and Toxicology
Archiv of Clinical Psychiatry
JPET
FEBS
FASEB
Etc...

Attività organizzative

1979-83-Membro del consiglio scientifico dell'Istituto di Psicobiologia e Psicofarmacologia del C.N.R. Roma.

1991-1995 Membro eletto del "Consiglio di Amministrazione" dell'Università di Firenze.

1991-1996 Coordinatore del Dottorato di Ricerca in Biologia e Clinica dell'Alcolismo

1997- Coordinatore Dottorato di Ricerca in Psicofarmacologia e Medicina delle Farmacodipendenze

1995-2002 Membro del consiglio direttivo dell' "Italian Study Group of Brain Aging".

1999-2010 Coordinatore Dottorato di Ricerca in Farmacologia e Tossicologia

2010-2013 Coordinatore Dottorato di Ricerca in Farmacologia e Terapie Innovative

Coordinatore di progetti di ricerca (Project leader) per lo studio dei recettori al glutammato finanziati dalla Commissione della Comunità Europea Biomed 1; Biomed 2 e Biotech 2.

Coordinatore di progetti nazionali di ricerca (ex MURST 40 %) su : Meccanismi molecolari della morte neuronale post-ischemica.

2004- Membro eletto del Consiglio Direttivo della Società Italiana di Neuroscienze

2007-2009 **Presidente** dell'International Society for Tryptophan Research (ISTRY)

2008- Segretario Scientifico del Comitato Organizzatore del Congresso Internazionale IBRO2001

2009-2013 **Presidente** della Società Italiana di Neuroscienze

2012-2020 Membro della Commissione Terapeutica regionale

2015- Membro della Commissione Valutazione Tesi di Dottorato per Florence University Press

2019- Membro del Comitato di Indirizzo della Fondazione Cassa di Risparmio di Volterra

Attività Scientifica

Si occupa di trasmissione eccitatoria e di eccitotossicità nel SNC ed ha contribuito all'identificazione farmacologica dei recettori al glutammato, al loro ruolo in Fisiologia e Patologia ed alla identificazione di leganti e modulatori endogeni per questi recettori.

Ha pubblicato vari libri sui Recettori al Glutammato e sulla morte neuronale post-ischemica. Ha ottenuto diversi brevetti nel settore di farmaci e neuroprotezione.

Ha messo a punto protocolli clinici per il trattamento di alcune intossicazioni acute quali l'avvelenamento da Amanita, l'avvelenamento da cianuro, l'avvelenamento da valproato o di intossicazioni croniche quali la tossicomania eroinica o da allucinogeni (ketamina)

E' autore di oltre 300 pubblicazioni sulle più qualificate riviste internazionali di Medicina Interna, Chimica Farmaceutica, Farmacologia, Tossicologia, Neuroscienze.

Publicazioni	(totali)	355
Citazioni totali		10070
Mean citation per publication		28
H factor		53 (dati del 2014, Maggio)

Publicazioni Scientifiche (Recenti; Selezionate)

Gerace E, Landucci E, Bani D, Moroni F, Mannaioni G, Pellegrini-Giampietro DE.(2019) Glutamate Receptor-Mediated Neurotoxicity in a Model of Ethanol Dependence and Withdrawal in Rat Organotypic Hippocampal Slice Cultures. *Front Neurosci.* 12:1053 IF:3,56

Mannaioni G, Lanzi C, Lotti M, Galli V, Totti A, Pacileo I, Sili M, Pracucci C, Dilaghi A, Bertieri L, Quaranta M, Orsini F, Occupati B, Michahelles A, Ciuti R, Bianchini E, Fabbro G, Biggeri A, Masini E, Moroni F. (2018) Methadone Dose Adjustments, Plasma R-Methadone Levels and Therapeutic Outcome of Heroin Users: A Randomized Clinical Trial. *Eur Addict Res.* 24:9-18. IF: 2,65

Mini E, Landini I, Lucarini L, Lapucci A, Napoli C, Perrone G, Tassi R, Masini E, Moroni F, Nobili S.(2017) The Inhibitory Effects of HYDAMTIQ, a Novel PARP Inhibitor, on Growth in Human Tumor Cell Lines With Defective DNA Damage Response Pathways. *Oncol Res.* **25**:1441-1451.IF:3,14

Berger NA, Besson VC, Boulares AH, Bürkle A, Chiarugi A, Clark RS, Curtin NJ, Cuzzocrea S, Dawson TM, Dawson VL, Haskó G, Liaudet L, Moroni F, Pacher P, Radermacher P, Salzman AL, Snyder SH, Soriano FG, Strosznajder RP, Sümegei B, Swanson RA, Szabo C. (2018) Opportunities for the repurposing of PARP inhibitors for the therapy of non-oncological diseases. *Br J Pharmacol.* **175**:192-222. IF:6,81

Lucarini L, Durante M, Lanzi C, Pini A, Boccalini G, Calosi L, Moroni F, Masini E, Mannaioni G. (2017). HYDAMTIQ, a selective PARP-1 inhibitor, improves bleomycin-induced lung fibrosis by dampening the TGF- β /SMAD signalling pathway. *J Cell Mol Med.* **21**:324-335. IF:4,3

Resta F, Masi A, Sili M, Laurino A, Moroni F, Mannaioni G.(2016) Kynurenic acid and zaprinast induce analgesia by modulating HCN channels through GPR35 activation. *Neuropharmacology.* **108**:136-43. IF:5,1

Gerace E, Landucci E, Totti A, Bani D, Guasti D, Baronti R, Moroni F, Mannaioni G, Pellegrini-Giampietro DE (2016) Ethanol Toxicity During Brain Development: Alterations of Excitatory Synaptic Transmission in Immature Organotypic Hippocampal Slice Cultures. *Alcohol Clin Exp Res.* **40**:706-16. IF:3,18

Gerace E, Pellegrini-Giampietro DE, Moroni F, Mannaioni G. (2015) .Poly(ADP-Ribose)Polymerase 1 (PARP-1) Activation and Ca(2+) Permeable α -Amino-3-Hydroxy-5-Methyl-4-Isloxazolepropionic Acid (AMPA) Channels in Post-Ischemic Brain Damage: New Therapeutic Opportunities? *CNS Neurol Disord Drug Targets.* **14** :636-46 IF:3,15

Gerace E, Landucci E, Scartabelli T, Moroni F, Chiarugi A, Pellegrini-Giampietro DE. (2015) Interplay between histone acetylation/deacetylation and poly(ADP-ribosyl)ation in the development of ischemic tolerance in vitro. *Neuropharmacology.* **92**:125-34. I.F:5,1

Gerace E, Masi A, Resta F, Felici R, Landucci E, Mello T, Pellegrini-Giampietro DE, Mannaioni, Moroni F. (2014) PARP-1 activation causes neuronal death in the hippocampal CA1 region by increasing the expression of Ca(2+)-permeable AMPA receptors. *Neurobiol Dis.* ; **70**:43-52. IF: 5,2

Lucarini L, Pini A, Gerace E, Pellicciari R, Masini E, Moroni F.(2014) Poly(ADP-ribose) polymerase inhibition with HYDAMTIQ reduces allergen-induced asthma-like reaction, bronchial hyper-reactivity and airway remodelling. *J Cell Mol Med.*;**18**:468-79. IF:3,7

Berlinguer-Palmini R, Masi A, Narducci R, Cavone L, Maratea D, Cozzi A, Sili M, Moroni F, Mannaioni G. (2014) GPR35 activation reduces Ca²⁺ transients and contributes to the kynurenic acid-dependent reduction of synaptic activity at CA3-CA1 synapses. *PLoS One.* **29**;8:e82180. IF:3,73.

Masi A, Narducci R, Landucci E, Moroni F, Mannaioni G.(2013) MPP(+) -dependent inhibition of I_h reduces spontaneous activity and enhances EPSP summation in nigral dopamine neurons. *Br J Pharmacol*;**169**:130-42. IF 4,9

Muzzi M, Blasi F, Masi A, Coppi E, Traini C, Felici R, Pittelli M, Cavone L, Pugliese AM, Moroni F, Chiarugi A (2013) Neurological basis of AMP-dependent thermoregulation and its relevance to central and peripheral hyperthermia. *J Cereb Blood Flow Metab.*; **33**:183-90. IF. 5,4

Gerace E, Scartabelli T, Formentini L, Landucci E, Moroni F, Chiarugi A, Pellegrini-Giampietro DE. (2012) Mild activation of poly(ADP-ribose) polymerase (PARP) is neuroprotective in rat hippocampal slice models of ischemic tolerance. *Eur J Neurosci.*; **36**:1993-2005. IF: 3,7

Moroni F, Cozzi A, Chiarugi A, Formentini L, Camaioni E, Pellegrini-Giampietro DE, Chen Y, Liang S, Zaleska MM, Gonzales C, Wood A, Pellicciari R. (2012) Long-lasting neuroprotection and neurological improvement in stroke models with new, potent and brain permeable inhibitors of poly(ADP-ribose) polymerase. *Br J Pharmacol.* **165**:1487-500; IF4,9

Moroni F, Cozzi A, Sili M, Mannaioni G. (2012) Kynurenic acid: a metabolite with multiple actions and multiple targets in brain and periphery. *J Neural Transm.* **119**:133-9. IF 2,59

Pittelli M, Felici R, Pitozzi V, Giovannelli L, Bigagli E, Cialdai F, Romano G, Moroni F, Chiarugi A. (2011) Pharmacological effects of exogenous NAD on mitochondrial bioenergetics, DNA repair, and apoptosis. *Mol Pharmacol.* **80**:1136-46. IF 5,73.

Lapucci A, Pittelli M, Rapizzi E, Felici R, Moroni F, Chiarugi A (2011) Poly(ADP-ribose) polymerase-1 is a nuclear epigenetic regulator of mitochondrial DNA repair and transcription. *Mol Pharmacol.* **79** :932-40. IF 5,73.

Cavone L, Aldinucci A, Ballerini C, Biagioli T, Moroni F, Chiarugi A.(2011) PARP-1 inhibition prevents CNS migration of dendritic cells during EAE, suppressing the encephalitogenic response and relapse severity. *Mult Scler.* **17**:794-807. IF 4,23.

Montagnese S, Biancardi A, Schiff S, Carraro P, Carlà V, Mannaioni G, Moroni F, Tono N, Angeli P, Gatta A, Amodio P.(2011) .Different biochemical correlates for different neuropsychiatric abnormalities in patients with cirrhosis. *Hepatology.* **53**:558-66. IF 9,33.

Landucci E, Scartabelli T, Gerace E, Moroni F, Pellegrini-Giampietro DE (2011) CB1 receptors and post-ischemic brain damage: studies on the toxic and neuroprotective effects of cannabinoids in rat organotypic hippocampal slices. *Neuropharmacology.* **60**:674-82. IF 4,78

Cosi C, Mannaioni G, Cozzi A, Carlà V, Sili M, Cavone L, Maratea D, Moroni F.(2011).G-protein coupled receptor 35 (GPR35) activation and inflammatory pain: Studies on the antinociceptive effects of kynurenic acid and zaprinast. *Neuropharmacology.* **60**:1227-31. IF. 4,78.

Pittelli M, Formentini L, Faraco G, Lapucci A, Rapizzi E, Cialdai F, Romano G, Moneti G, Moroni F, Chiarugi A. (2010) Inhibition of nicotinamide phosphoribosyltransferase: cellular bioenergetics reveals a mitochondrial insensitive NAD pool. *J Biol Chem.* **285**:34106-14. IF 5,9

Riggio O, Mannaioni G, Ridola L, Angeloni S, Merli M, Carlà V, Salvatori FM, Moroni F. (2010) Peripheral and splanchnic indole and oxindole levels in cirrhotic patients: a study on the pathophysiology of hepatic encephalopathy. *Am J Gastroenterol.* **105**:1374-81; IF. 6,88

- Faraco G, Blasi F, Min W, Wang ZQ, Moroni F, Chiarugi A. (2010) Brain ischemic preconditioning does not require PARP-1. *Stroke*. **41**:181-3.; IF. 7,041
- Faraco G, Pittelli M, Cavone L, Fossati S, Porcu M, Mascagni P, Fossati G, Moroni F, Chiarugi A.(2009) Histone deacetylase (HDAC) inhibitors reduce the glial inflammatory response in vitro and in vivo. *Neurobiol Dis*. 2009 IF 4,85
- Landucci E, Boscia F, Gerace E, Scartabelli T, Cozzi A, Moroni F, Mannaioni G, Pellegrini-Giampietro DE. (2009) Involvement of endocannabinoid signaling in the neuroprotective effects of subtype 1 metabotropic glutamate receptor antagonists in models of cerebral ischemia. *Int Rev Neurobiol*;**85**:337-50.IF3,67
- Formentini L, Moroni F, Chiarugi A (2009) Detection and pharmacological modulation of nicotinamide mononucleotide (NMN) in vitro and in vivo. *Biochem Pharmacol*.**77**:1612-20. IF:4,83
- Moroni F, Formentini L, Gerace E, Camaioni E, Pellegrini-Giampietro DE, Chiarugi A, Pellicciari R. (2009) Selective PARP-2 inhibitors increase apoptosis in hippocampal slices but protect cortical cells in models of post-ischaemic brain damage. *Br J Pharmacol*. ;**157**:854-62.IF:4,9
- Formentini L, Macchiarulo A, Cipriani G, Camaioni E, Rapizzi E, Pellicciari R, Moroni F, Chiarugi A. (2009) Poly(ADP-ribose) catabolism triggers AMP-dependent mitochondrial energy failure. *J Biol Chem*. **284**:17668-76. IF 5,9
- Moroni F, Chiarugi A. (2009) Post-ischemic brain damage: targeting PARP-1 within the ischemic neurovascular units as a realistic avenue to stroke treatment. *FEBS J*. **276**:36-45.IF: 3,26
- Formentini L, Arapistas P, Pittelli M, Jacomelli M, Pitozzi V, Menichetti S, Romani A, Giovannelli L, Moroni F, Chiarugi A.(2008) Mono-galloyl glucose derivatives are potent poly(ADP-ribose) glycohydrolase (PARG) inhibitors and partially reduce PARP-1-dependent cell death. *Br J Pharmacol*.**155**:1235-49.IF 4,92
- Scartabelli T, Gerace E, Landucci E, Moroni F, Pellegrini-Giampietro DE. (2008) Neuroprotection by group I mGlu receptors in a rat hippocampal slice model of cerebral ischemia is associated with the PI3K-Akt signaling pathway: a novel postconditioning strategy? *Neuropharmacology*.**55**:509-16; IF 3,38
- Boscia F, Ferraguti F, Moroni F, Annunziato L, Pellegrini-Giampietro DE.(2008) mGlu1alpha receptors are co-expressed with CB1 receptors in a subset of interneurons in the CA1 region of organotypic hippocampal slice cultures and adult rat brain. *Neuropharmacology*. **55**:428-39; IF 3,38
- Moroni F. (2008) Poly(ADP-ribose)polymerase 1 (PARP-1) and postischemic brain damage.*Curr Opin Pharmacol*. **8**: 96-103; IF 4,59

Pellicciari R, Camaioni E, Costantino G, Formentini L, Sabbatini P, Venturoni F, Eren G, Bellocchi D, Chiarugi A, Moroni F. (2008) On the way to selective PARP-2 inhibitors. Design, synthesis, and preliminary evaluation of a series of isoquinolinone derivatives. *ChemMedChem*. **6** : 914-23. IF: 2,3

Aldinucci, A., Gerlini, G., Fossati, S., Cipriani, G., Ballerini, C., Biagioli, T., Pimpinelli, N., Borgognoni, L., Massacesi, L., Moroni, F. & Chiarugi, A. (2007) A key role for poly(ADP-ribose) polymerase-1 activity during human dendritic cell maturation. *J. Immunol.* **179**: 305-312. IF: 7,42

Faraco, G., Fossati, S., Bianchi, M. E., Patrone, M., Pedrazzi, M., Sparatore, B., Moroni, F. & Chiarugi, A. (2007) High mobility group box 1 protein is released by neural cells upon different stresses and worsens ischemic neurodegeneration in vitro and in vivo. *J. Neurochem.* **103** :590-603. IF: 4,95

Fossati, S., Cipriani, G., Moroni, F. & Chiarugi, A. (2007) Neither energy collapse nor transcription underlie in vitro neurotoxicity of poly(ADP-ribose) polymerase hyper-activation. *Neurochem. Int.* **50**: 203-210. IF: 3,16

Giannini, L., Vannacci, A., Missanelli, A., Mastroianni, R., Mannaioni, P. F., Moroni, F. & Masini, E. (2007) Amatoxin poisoning: a 15-year retrospective analysis and follow-up evaluation of 105 patients. *Clin Toxicol. (Phila)* **45**: 539-542. IF: 1,1

Werner, C.G., Scartabelli, T., Pancani, T., Landucci, E., Moroni, F. & Pellegrini-Giampietro, D. E. (2007) Differential role of mGlu1 and mGlu5 receptors in rat hippocampal slice models of ischemic tolerance. *Eur. J. Neurosci.* **25**: 3597-3604. IF: 4,92

PELLICCIARI R, MORONI F. (2006). Thieno[2,3-C]isoquinolines for use as inhibitor of PARP. USA Patent N° 6,989,388 B2 issued Jan 24th 2006.

Cozzi, A., Cipriani, G., Fossati, S., Faraco, G., Formentini, L., Min, W., Cortes, U., Wang, Z.-Q., Moroni, F. & Chiarugi, A. (2006) Poly(ADP-ribose) accumulation and enhancement of postischemic brain damage in 110-kDa poly(ADP-ribose) glycohydrolase null mice. *J. Cereb. Blood Flow Metab* **25**: 684-695. IF: 6,55

Cozzi, A., Zignego, A. L., Carpenedo, R., Biagiotti, T., Aldinucci, A., Monti, M., Giannini, C., Rosselli, M., Laffi, G. & Moroni, F. (2006) Low serum tryptophan levels, reduced macrophage IDO activity and high frequency of psychopathology in HCV patients. *J. Viral Hepatitis* **13**: 402-408. IF: 3,29

Faraco, G., Pancani, T., Formentini, L., Mascagni, P., Fossati, S., Leoni, F., Moroni, F. & Chiarugi, A. (2006) Pharmacological inhibition of histone deacetylases (HDACs) by suberoylanilide hydroxamic acid (SAHA) specifically alters gene expression and reduces ischemic injury in the mouse brain. *Mol. Pharmacol.* **70**: 1876-1884. IF: 6,58

Fossati, S., Formentini, L., Wang, Z. Q., Moroni, F. & Chiarugi, A. (2006) Poly(ADP-ribosylation) regulates heat shock factor-1 activity and the heat shock response in murine fibroblasts. *Biochem. Cell Biol.* **84**: 703-712. IF: 3,48

Cipriani, G., Rapizzi, E., Vannacci, A., Rizzuto, R., Moroni, F. & Chiarugi, A. (2005) Nuclear poly(ADP-ribose) polymerase-1 rapidly triggers mitochondrial dysfunction. *J. Biol. Chem.* **280**: 17227-17234. IF: 7,38

Conti, P., De Amici, M., Grazioso, G., Roda, G., Pinto, A., Hansen, K. B., Nielsen, B., Madsen, U., Brauner-Osborne, H., Egebjerg, J., Vestri, V., Pellegrini-Giampietro, D. E., Sibille, P., Acher, F. C. & De Micheli, C. (2005) Synthesis, binding affinity at glutamic acid receptors, neuroprotective effects, and molecular modeling investigation of novel dihydroisoxazole amino acids. *J. Med. Chem.* **48**: 6315-6325. IF: 5,07

Cozzi, A., Cipriani, G., Fossati, S., Faraco, G., Formentini, L., Min, W., Cortes, U., Wang, Z.-Q., Moroni, F. & Chiarugi, A. (2006) Poly(ADP-ribose) accumulation and enhancement of postischemic brain damage in 110-kDa poly(ADP-ribose) glycohydrolase null mice. *J. Cereb. Blood Flow Metab* **25**: 684-695. IF: 6,55

Di Serio, C., Cozzi, A., Angeli, I., Doria, L., Micucci, I., Pellerito, S., Mirone, P., Masotti, G., Moroni, F. & Tarantini, F. (2005) Kynurenic acid inhibits the release of the neurotrophic fibroblast growth factor (FGF)-1 and enhances proliferation of glia cells, in vitro. *Cell. Mol. Neurobiol.* **25**: 981-993. IF: 2,21

Mannaioni, G., Baronti, R. & Moroni, F. (2005) Gastrointestinal bleeding and massive liver damage in neuroleptic malignant syndrome. *Ther. Clin Risk Manag.* **1**: 225-229.

Meli, E., Baronti, R., Pangallo, M., Picca, R., Moroni, F. & Pellegrini-Giampietro, D. E. (2005) Group I metabotropic glutamate receptors stimulate the activity of poly(ADP-ribose) polymerase in mammalian mGlu1-transfected cells and in cortical cell cultures. *Neuropharmacology* **49** (suppl. 1): 80-88. IF: 3,86

Moroni, F., Cozzi, A., Carpenedo, R., Cipriani, G., Veneroni, O. & Izzo, E. (2005) Kynurenine 3-mono-oxygenase inhibitors reduce glutamate concentration in the extracellular spaces of the basal ganglia but not in those of the cortex or hippocampus. *Neuropharmacology* **48**: 788-795. IF: 3,86

Adembri, C., Bechi, A., Meli, E., Gramigni, E., Venturi, L., Moroni, F., De Gaudio, A. R. & Pellegrini-Giampietro, D. E. (2004) Erythropoietin attenuates post-traumatic injury in organotypic hippocampal slices. *J. Neurotrauma* **8**: 1103-1112. IF: 3,45

Costantino, G., Marinozzi, M., Camaioni, E., Natalini, B., Sarichelou, I., Micheli, F., Cavanni, P., Faedo, S., Noe, C., Moroni, F. & Pellicciari, R. (2004) Stereoselective synthesis and preliminary evaluation of (+)- and (-)-3-methyl-5-carboxy-thien-2-yl-glycine (3-MATIDA): identification of (+)-3-MATIDA as a novel mGluR1 competitive antagonist. *Farmaco* **59**: 93-99.

Meli E., Pangallo M., Picca R., Baronti R., Moroni F. & Pellegrini-Giampietro D.E. (2003) Differential role of poly(ADP-ribose) polymerase (PARP-1) in apoptotic and necrotic neuronal death induced by mild or intense NMDA exposure. *Mol. Cell. Neurosci.* **25**: 172-180. IF: 4,6

Rapizzi, E., Fossati, S., Moroni, F. & Chiarugi, A. (2004) Inhibition of poly(ADP-ribose) glycohydrolase by gallotannin selectively up-regulates expression of pro-inflammatory genes. *Mol. Pharmacol.* **66**: 890-898. IF: 6,58

Chiarugi, A., Meli, E., Calvani, M., Picca, R., Baronti, R., Camaioni, E., Costantino, G., Marinozzi, M., Pellegrini-Giampietro, D. E., Pellicciari, R. & Moroni, F. (2003) Novel isoquinolinone-derived inhibitors of poly(ADP-ribose) polymerase-1: pharmacological characterization and neuroprotective effects in an in vitro model of cerebral ischemia. *J. Pharmacol. Exp. Ther.* **305**: 943-949. IF: 3,96

Chiarugi, A., Rovida, E., Dello Sbarba, P. & Moroni, F. (2003) Tryptophan availability selectively limits NO-synthase induction in macrophages. *J. Leukoc. Biol.* **73**: 172-177. IF: 4,52

Mannaioni, G., Carpenedo, R. & Moroni, F. (2003) 5-Hydroxyindole causes convulsions and increases transmitter release in the CA1 region of rat hippocampus. *Brit. J. Pharmacol.* **138**: 245-253. IF: 4,74

Meli, E., Pangallo, M., Baronti, R., Chiarugi, A., Cozzi, A., Pellegrini-Giampietro, D. E. & Moroni, F. (2003) Poly(ADP-ribose) polymerase as a key player in excitotoxicity and post-ischemic brain damage. *Toxicol. Lett.* **193**: 153-162. IF: 2,78

Pellicciari, R., Camaioni, E., Costantino, G., Marinozzi, M., Macchiarulo, A., Moroni, F. & Natalini, B. (2003) Towards new neuroprotective agents: design and synthesis of 4H-thieno[2,3-c] isoquinolin-one derivatives as potent PARP-1 inhibitors. *Farmaco* **58**: 851-858.

Smorlesi, C., Caldarella, A., Caramelli, L., Di Lollo, S. & Moroni, F. (2003) Topically applied minoxidil may cause fetal malformation: a case report. *Birth Defects Res. A* **67**: 997-1001.

Attucci, S., Clodfelter, G. V., Thibault, O., Staton, J., Moroni, F., Landfield, P. W. & Porter, N. M. (2002) Group I metabotropic glutamate receptor inhibition selectively blocks a prolonged Ca²⁺ elevation associated with age-dependent excitotoxicity. *Neuroscience* **112**: 183-194. IF: 4,3

Carpenedo, R., Meli, E., Peruginelli, F., Pellegrini-Giampietro, D. E. & Moroni, F. (2002) Kynurenine 3-mono-oxygenase inhibitors attenuate post-ischemic neuronal death in organotypic hippocampal slice cultures. *J. Neurochem.* **82**: 1465-1471. IF: 4,85

Cozzi, A., Meli, E., Carlà, V., Moroni, F. & Pellegrini-Giampietro, D. E. (2002) Metabotropic glutamate (mGlu1) receptor antagonists enhance GABAergic neurotransmission: a mechanism for the attenuation of post-ischemic injury and epileptiform activity? *Neuropharmacology* **43**: 119-130. IF: 3,86

Gardoni, F., Bellone, C., Viviani, B., Marinovich, M., Meli, E., Pellegrini-Giampietro, D. E., Cattabeni, F. & Di Luca, M. (2002) Lack of PSD-95 drives neuronal cell death through activation of alpha-CaMKII transduction pathway. *Eur. J. Neurosci.* **16**: 777-786. IF: 4,92

Giovannelli, L., Cozzi, A., Guarnieri, I., Dolara, P. & Moroni, F. (2002) Comet assay as a novel approach for studying DNA damage in focal cerebral ischemia: differential effects of NMDA receptor antagonists and poly(ADP-ribose) polymerase inhibitors. *J. Cereb. Blood Flow Metab.* **22**: 697-704. IF: 6,55

Mannaioni, G., Vannacci, A., Marzocca, C., Zorn, A. M., Peruzzi, S. & Moroni, F. (2002) Acute cyanide intoxication treated with a combination of hydroxycobalamin, sodium nitrite, and sodium thiosulfate. *J. Toxicol. Clin. Toxicol.* **40**: 181-183. IF: 1,1

Meli, E., Picca, R., Attucci, S., Cozzi, A., Peruginelli, F., Moroni, F. & Pellegrini-Giampietro, D. E. (2002) Activation of mGlu1 but not mGlu5 metabotropic glutamate receptors contributes to post-ischemic neuronal injury in vitro and in vivo. *Pharmacol. Biochem. Behav.* **73**: 439-446. IF: 2,1

Moroni, F., Attucci, S., Cozzi, A., Meli, E., Picca, R., Scheideler, M. A., Pellicciari, R., Noe, C., Sarichelou, I. & Pellegrini-Giampietro, D. E. (2002) The novel and systemically active metabotropic glutamate 1 (mGlu1) receptor antagonist 3-MATIDA reduces post-ischemic neuronal death. *Neuropharmacology* **42**: 741-751. IF: 3,86

Attucci, S., Albani-Torregrossa, S., Moroni, F. & Pellegrini-Giampietro, D.E. (2001) Metabotropic glutamate receptors stimulate phospholipase D via different pathways in the adult and neonate rat hippocampus. *Neurochem. Res.* **26**: 1151-1155. IF: 2,13

Attucci, S., Carlà, V., Mannaioni, G. & Moroni, F. (2001) Activation of type 5 metabotropic glutamate receptors enhances NMDA responses in mice cortical wedges. *Br. J. Pharmacol.* **132**: 799-806. IF: 4,74

Carpenedo, R., Pittaluga, A., Cozzi, A., Attucci, S., Galli, A., Raiteri, M. & Moroni, F. (2001) Presynaptic kynurenate receptors inhibit glutamate release. *Eur. J. Neurosci.* **13**: 2141-2147. IF: 4,92

Chiarugi, A., Calvani, M., Meli, E., Traggiati, E. & Moroni, F. (2001) Synthesis and release of neurotoxic kynurenine metabolites by human monocyte-derived macrophages. *J. Neuroimmunol.* **120**: 190-198. IF: 2,88

Chiarugi, A., Cozzi, A., Ballerini, C., Massacesi, L. & Moroni, F. (2001) Kynurenine 3-mono-oxygenase activity and neurotoxic kynurenine metabolites increase in the spinal cord of rats with experimental allergic encephalomyelitis. *Neuroscience* **102**: 687-695. IF: 4,3

Chiarugi, A., Meli, E. & Moroni, F. (2001) Similarities and differences in the neuronal death processes activated by 3OH-kynurenine and quinolinic acid. *J. Neurochem.* **77**: 1310-1318. IF: 4,85

Moroni, F., Meli, E., Peruginelli, F., Chiarugi, A., Cozzi, A., Picca, R., Romagnoli, P., Pellicciari, R. & Pellegrini-Giampietro, D. E. (2001) Poly(ADP-ribose) polymerase inhibitors attenuate necrotic but not apoptotic neuronal death in experimental models of cerebral ischemia. *Cell Death Differ.* **8**: 921-932. IF: 7,46

Chiarugi, A., Dello Sbarba, P., Paccagnini, A., Donnini, S., Filippi, S. & Moroni, F. (2000) Combined inhibition of indoleamine 2,3-dioxygenase and nitric oxide synthase modulates neurotoxin release by interferon-gamma-activated macrophages. *J. Leukoc. Biol.* **68**: 260-266.

Pastorino, L., Colciaghi, F., Gardoni, F., Albani-Torregrossa, S., Pellegrini-Giampietro, D.E., Moroni, F., De Graan, P.N.E., Cattabeni, F. & Di Luca, M. (2000) (+)MCPG induces PKC-

epsilon translocation in cortical synaptosomes through a PLD-coupled mGluR. *Eur. J. Neurosci.* **12**: 1310-1318. IF:4,92

Albani Torregrossa, S., Attucci, S., Marinozzi, M., Pellicciari, R., Moroni, F. & Pellegrini-Giampietro, D.E. (1999) Antagonist pharmacology of metabotropic glutamate receptors coupled to phospholipase D activation in adult rat hippocampus: focus on (2R,1'S,2'R,3'S)-2-(2'-carboxy-3'-phenylcyclopropyl)glycine versus 2,3-dihydroxyphenylglycine. *Mol. Pharmacol.* **55**: 699-707. IF: 6,58

Chiarugi, A. & Moroni, F. (1999) Effects of mitochondria and *o*-methoxybenzoylalanine on 3-hydroxyanthranilic acid dioxygenase activity and quinolinic acid synthesis. *J. Neurochem.* **72**: 1125-1132. IF: 4,85

Chiarugi, A. & Moroni, F. (1999) Quinolinic acid formation in immune-activated mice: studies with (*m*-nitrobenzoyl)-alanine (*m*NBA) and 3,4-dimethoxy-[N-4-(-3-nitrophenyl)thiazol-2yl]-benzenesulfonamide (Ro 61-8048), two potent and selective inhibitors of kynurenine hydroxylase. *Neuropharmacology* **38**: 1225-1233. IF: 3,86

Chiarugi, A., Rapizzi, E., Moroni, F., Jr. & Moroni, F. (1999) The kynurenine metabolic pathway in the eye: studies on 3-hydroxykynurenine, a putative carcinogenic compound. *FEBS Lett.* **453**: 197-200.

Cozzi, A., Carpenedo, R. & Moroni, F. (1999) Kynurenine hydroxylase inhibitors reduce ischemia brain damage: studies with (*m*-nitrobenzoyl)-alanine (*m*NBA) and 3,4-dimethoxy-[N-4-(nitrophenyl)thiazol-2yl]-benzenesulfonamide (RO 61-8048) in models of focal or global ischemia. *J. Cereb. Blood Flow Metab.* **19**: 771-777. IF: 6,55

Mannaioni, G., Attucci, S., Missanelli, A., Pellicciari, R., Corradetti, R. & Moroni, F. (1999) Biochemical and electrophysiological studies on (S)-(+)-2-(3'-carboxybicyclo[1.1.1]pentyl)-glycine (CBPG), a novel mGlu5 receptor agonist endowed with mGlu1 receptor antagonist activity. *Neuropharmacology* **38**: 917-926. IF: 3,86

Moroni, F. (1999) Tryptophan metabolism and brain function: focus on kynurenine and other indole metabolites. *Eur. J. Pharmacol.* **375**: 87-100. IF: 2,52

Pellegrini-Giampietro, D.E., Cozzi, A., Peruginelli, F., Leonardi, P., Meli, E., Pellicciari, R. & Moroni, F. (1999) 1-Amino-1,5-dicarboxylic acid and (S)-(+)-2-(3'-carboxybicyclo[1.1.1]pentyl)-glycine, two mGlu1 receptor-preferring antagonists, reduce neuronal death in in vitro and in vivo models of cerebral ischemia. *Eur. J. Neurosci.* **11**: 3637-3647. IF: 4,92

Pellegrini-Giampietro, D.E., Peruginelli, F., Meli, E., Cozzi, A., Albani Torregrossa, S., Pellicciari, R. & Moroni, F. (1999) Protection with mGlu1 receptor antagonists in models of ischemic neuronal death: time-course and mechanisms. *Neuropharmacology* **38**: 1607-1620. IF: 3,86

Pellicciari, R., Marinozzi, M., Costantino, G., Natalini, B., Macchiarulo, A., Moroni, F. & Pellegrini-Giampietro, D.E. (1999). (2R, 1'S, 2'R, 3'S)-2-(2'-Carboxy-3'-phenylcyclopropyl)glycine (PCCG-13), the first potent and selective competitive antagonist of

PLD-coupled metabotropic receptors. Asymmetric synthesis and preliminary biological reports. *J. Med. Chem.* **42**: 2716-2720. IF: 5,07

Carpenedo, R., Mannaioni, G. & Moroni, F. (1998) Oxindole, a sedative tryptophan metabolite, accumulates in blood and brain of rats with acute hepatic failure. *J. Neurochem.* **70**: 1998-2003. IF: 4,85

Mannaioni, G., Carpenedo, R., Pugliese, A.M., Corradetti, R. & Moroni, F. (1998) Electrophysiological studies on oxindole, a neurodepressant tryptophan metabolite. *Br. J. Pharmacol.* **125**: 1751-1760. IF: 4,74

Moroni, F., Carpenedo, R., Venturini, I., Baraldi, M. & Zeneroli, M.L. (1998) Oxindole in pathogenesis of hepatic encephalopathy. *Lancet* **351**: 1861-1861. IF: 17,5

Moroni, F., Cozzi, A., Lombardi, G., Sourtcheva, S., Leonardi, P., Carfì, M. & Pellicciari, R. (1998) Presynaptic mGlu1 type receptors potentiate transmitter output in the rat cortex. *Eur. J. Pharmacol.* **347**: 189-195. IF: 2,52

Carpenedo, R., Carlà, V., Moneti, G., Chiarugi, A. & Moroni, F. (1997) Identification and measurement of oxindole (2-indolinone) in the mammalian brain and other rat organs. *Analyt. Biochem.* **244**: 74-79.

Cozzi, A., Attucci, S., Peruginelli, F., Marinozzi, M., Luneia, R., Pellicciari, R. & Moroni, F. (1997) Type 2 metabotropic glutamate (mGlu) receptors tonically inhibit transmitter release in rat caudate nucleus: in vivo studies with (2S,1'S, 2'S, 3'R)-2-(2'-carboxy-3'-phenylcyclopropyl)glycine, a new potent and selective antagonist. *Eur. J. Neurosci.* **9**: 1350-1355. IF: 4,92

Matini, P., Moroni, F.Jr., Lombardi, G., Fausson-Pellegrini, M.-S. & Moroni, F. (1997) Ultrastructural and biochemical studies on the neuroprotective effects of excitatory amino acid antagonists in the ischemic rat retina. *Exp. Neurol.* **146**: 419-434.

Moroni, F., Lombardi, G., Thomsen, C., Leonardi, P., Attucci, S., Peruginelli, F., Albani Torregrossa, S., Pellegrini-Giampietro, D.E., Luneia, R. & Pellicciari, R. (1997) Pharmacological characterization of 1-aminoindan-1,5-dicarboxylic acid, a potent mGluR1 antagonist. *J. Pharmacol. Exp. Ther.* **281**: 721-729. IF: 3,86

Moroni, F. (1997) Type 1 metabotropic glutamate receptor antagonists reduce post-trauma neuronal death. *NeuroReport* **8**: 11 IF: 2,14

Chiarugi, A., Carpenedo, R. & Moroni, F. (1996) Kynurenine disposition in blood and brain of mice: effects of selective inhibitors of kynurenine hydroxylase and of kynureninase. *J. Neurochem.* **69**: 692-698. IF: 4,85

Lombardi, G., Leonardi, P. & Moroni, F. (1996) Metabotropic glutamate receptors, transmitter output and fatty acids: studies in rat brain slices. *Br. J. Pharmacol.* **117**: 189-195. IF: 4,74

Mannaioni, G., Carlà, V. & Moroni, F. (1996) Pharmacological characterization of metabotropic glutamate receptors potentiating NMDA responses in mouse cortical wedge preparations. *Br. J. Pharmacol.* **118**: 1530-1536. IF: 4,74

Pellegrini-Giampietro, D.E., Albani Torregrossa, S. & Moroni, F. (1996) Pharmacological characterization of metabotropic glutamate receptors coupled to phospholipase D in the rat hippocampus. *Br. J. Pharmacol.* **118**: 1035-1043. IF: 4,74

Pellicciari, R., Marinozzi, M., Natalini, B., Costantino, G., Luneia, R., Giorgi, G., Moroni, F. & Thomsen, C. (1996) Synthesis and pharmacological characterization of all sixteen stereoisomers of 2-(2'-carboxy-3'-phenylcyclopropyl)glycine. Focus on (2S,1'S,2'S,3'R)-2-(2'-carboxy-3'-phenylcyclopropyl)glycine, a novel and selective group II metabotropic glutamate receptor antagonist. *J. Med. Chem.* **39**: 2259-2269. IF: 5,07