

CURRICULUM VITAE

Name: Rosalia BERTORELLI

Citizenship: Italian

Office Address: In Vivo Pharmacology Facility
Istituto Italiano di Tecnologia (IIT)
Via Morego, 30, 16163 Genoa, Italy

LANGUAGES Italian, English

EDUCATION

1989 Post-graduate degree (PhD equivalent) in Pharmacology -
Mario Negri Research Institute – Milan-Italy

1985 MSc in Biological Sciences -
University of Milan-Italy

EXPERIENCE

2018- Present **Technologist**
In Vivo Pharmacology Facility, IIT

2014- 2017 **Technologist,**
D3, Drug Discovery and Development,
PharmaChemistry Facility, IIT

- Member of Cystic Fibrosis Group study to discover new potential therapeutic drugs
- Studies on genetic models of autism.
- Assessment of efficacy of drugs and drug delivery systems in animal models of diseases related to wound and burn healing models in rodents, in collaboration with the Smart Materials Department at IIT. Exploration of new therapeutic opportunities.
- Studies on drug delivery system in several models of chronic pain
- Evaluation of acute and chronic toxicity of nanomaterials and drugs in rodents
- Pharmacokinetic (PK) determination of drugs and drug metabolites in blood and tissues
- Establish and maintain collaboration inside and outside the IIT
- Member of Animal Welfare Committee

2014- 2015 Researcher,
D3, Drug Discovery and Development,
PharmaChemistry Facility, IIT

- Assessment of efficacy of drugs and drug delivery systems in animal models of diseases. Initial studies performed using wound healing models in rodents, in collaboration with the Smart Materials Department at IIT. Exploration of new therapeutic opportunities.
- Evaluation of acute and chronic toxicity of nanomaterials and drugs in rodents
- Pharmacokinetic (PK) determination of drugs and drug metabolites in blood and tissues
- Establish and maintain collaboration inside and outside the IIT
- Member of Animal Welfare Committee

2009 - 2014 Team Leader *In vivo* Pharmacology
D3, Drug Discovery and Development, IIT

- Responsible of *In vivo* pharmacology Unit with the aim to develop *in vivo* animal models of pain (acute and chronic pain, such as neuropathic and inflammatory pain) and neurodegeneration (learning and memory for the treatment of Alzheimer's disease). Pharmacokinetic/Pharmacodynamic (PK/PD) and basic toxicity (TK) studies (planning and study design, preparation of samples).
- Responsible for the management and supervision of direct reports and their professional development.
- Project Leader to develop new treatments and devices for wound healing and contact dermatitis.
- Member of several cross-functional teams to design and develop new pharmacologically active compounds.
- Member of Steering Committee for Animal facility.

2001 – 2009 Section Leader Neuropharmacology
Schering-Plough Research Institute, San Raffaele Science Park, Via Olgettina, 58,
20132 Milan, Italy

- Head of Neuropharmacology Unit with the aim to develop *in vivo* animal models of pain (acute and chronic pain, such as neuropathic and inflammatory pain). PK/PD and basic TK studies (planning and study design, preparation of samples)
- Responsible for the management and supervision of direct reports and their professional development.
- Project leader of multidisciplinary teams of scientists (from chemistry, biology, and toxicology) to develop new pharmacologically active compounds on different molecular targets and across diverse therapeutic indications. Validation of novel targets for pain. Member of International Project Teams.

1997 – 2001 Principal Scientist

Schering-Plough Research Institute, San Raffaele Science Park, Via Olgettina, 58, 20132 Milan, Italy

Setting up *in vivo* animal models of disease. Area of interest: Parkinson's disease. Main responsibility was to design, establish and progress the identification of new therapeutic application and new developable ligands for the treatment of Parkinson's disease. One molecule was developed up to Phase III (PRELADENANT) for Parkinson's disease treatment. On June 2013, Merck discontinued the studies for lack of efficacy compared to placebo.

1993 - 1997 Senior Researcher

Schering-Plough S.p.A., Research Laboratories – Pharmacology, Comazzo, Milan

Setting up *in vivo* animal models of disease. Areas of interest: epilepsy, sleep disorders, neurodegeneration, cerebral ischemia. Head of a small group of scientists.

1991

INSERM - Institute of Pharmacology and Endocrinology

Montpellier, France

Studies on G-protein regulation in C6 cells (1 published paper)

1989-1990

Department of Pharmacology

Karolinska Institute

Stockholm, Sweden

Upgrade on microdialysis technique (1 published paper)

1986-1992

Post-graduate Course and Postdoctoral Fellowship

Mario Negri Research Institute, Laboratory of Cholinergic System

Milan, Italy

Studies on interaction between cholinergic and dopamime, setoronin, and noradrenaline systems. Involvement of the peptide galanin in the modulation of cholinergic system. During this period, 18 papers were published in International Journals

SCIENTIFIC EXPERTISE

In disease areas such as: - Pain (Acute and Chronic)

- Parkinson's disease

- Cerebral Ischemia

- Depression

- Epilepsy

- Sleep Disorders

- Respiratory disorders

- Wound healing/contact dermatitis

In neurotransmitter systems such as:

- Excitatory Aminoacids
- Central Monoamines
- Neuropeptide families
- Cytokines
- Cannabinoids/endocannabinoids

PROFESSIONAL SOCIETIES

Società Italiana di Farmacologia
 Società Italiana di Neuroscienze
 International Association for the Study of Pain
 Associazione Italiana per lo Studio del Dolore
 Society for Neuroscience

Reviewer for International Journals, such as Eur. J. Pharmacol, Br. J. Pharmacol, Neurosci Lett., Peptides, Brain Res., Eur J Pain, Physiol Behav.

Reviewer in evaluation process of proposals to be funded for the Michael J. Fox Foundation (MJFF) for Parkinson's disease, and for ANR, the French National Research Agency.

UNIVERSITY COURSES AND MENTORING ACTIVITY

- Lecturer in the PhD Courses in Drug Discovery.
- Invited Speaker at several Meetings and Universities/Centers
- Supervisor/tutor of BSc, MSc and PhD students

OTHER COMPETENCES

Establish and maintain frequent contacts and interactions with key persons of the Italian Ministry of Health and Istituto Superiore di Sanità for the preparation and discussion of experimental protocols in compliance with European law on animal research.

Maintain frequent contacts with key persons of Italian Ministry of Health for the use of controlled substances for experimental use and subsequent preparation of documents and records reporting their experimental usage.

Broad experience as Member of the Committee for Animal Welfare, with a leading role in: 1) Supporting and refining the research methodology to reduce and ultimately replace animals with alternative procedures, wherever possible (following the 3R's: Replacement, Reduction, and Refinement); 2). evaluating and approving the proposal studies, in collaboration with the Veterinary and the Animal Facility Manager, before sending the projects to the Italian Ministry of Health for

the final evaluation: 3) establishing guidelines and procedures in compliance with the European laws for research animal welfare.

FULL LIST OF PUBLICATIONS

More than 70 papers published on refereed journals or books.

H index 32, 3294 citations, source Scopus

1. Suarato G., **Bertorelli R.**, Athanassiou A. Borrowing from Nature: biopolymers and biocomposites as smart wound care materials *Frontiers in Bioengineering and Biotechnology* DOI: doi: 10.3389/fbioe.2018.00137
2. Szczurkowska J, Pischedda F, Pinto B, Managò F, Haas CA, Summa M, **Bertorelli R**, Papaleo F, Schäfer MK, Piccoli G, Cancedda L., NEGR1 and FGFR2 cooperatively regulate cortical development and core behaviours related to autism disorders in mice. *Brain*. 2018 Sep 1;141(9):2772-2794. doi: 10.1093/brain/awy190.
3. Heredia-Guerrero J.A., Ceseracciu L., Guzman-Puyol S., Paul U.C., Alfaro-Pulido A., Grande C., Vezzulli L., Bandiera T., **Bertorelli R.**, Russo D., Athanassiou A, Bayer I.S. Antimicrobial, antioxidant, and waterproof RTV silicone-ethyl cellulose composites containing clove essential oil. *Carbohydrate Polymers*, 2018, 10.1016/j.carbpol.2018.03.050
4. Bonfiglio T, Olivero G, Vergassola M, Di Cesare Mannelli L, Pacini A, Iannuzzi F, Summa M, **Bertorelli R**, Feligioni M, Ghelardini C, Pittaluga A. Environmental training is beneficial to clinical symptoms and cortical presynaptic defects in mice suffering from experimental autoimmune encephalomyelitis. *Neuropharmacology*. 2018 Feb 2. pii: S0028-3908(18)30026-1. doi: 10.1016/j.neuropharm.2018.01.026
5. Summa M, Russo D, Penna I, Margaroli N, Bayer IS, Bandiera T, Athanassiou A, **Bertorelli R**. A biocompatible sodium alginate/povidone iodine film enhances wound healing. *Eur J Pharm Biopharm*. 2018 Jan;122:17-24. doi: 10.1016/j.ejpb.2017.10.004.
6. Goman-Puyol S, Russo D, Penna I, Ceseracciu L, Palazon F, Scarpellini A, Cingolani R, **Bertorelli R**, Bayer IS, Heredia-Guerrero A, Athanassiou A. Facile production of seaweed-based biomaterials with antioxidant and anti-inflammatory activities. *Algal Research* 2017, 27; 1-11dx.doi.org/10.1016/j.algal.2017.08.015
7. Contardi M, Heredia-Guerrero JA, Perotto G, Valentini P, Pompa PP, Spanò R, Goldoni L, **Bertorelli R**, Athanassiou A, Bayer IS. Transparent

- ciprofloxacin-povidone antibiotic films and nanofiber mats as potential skin and wound care dressings. *Eur J Pharm Sci.* 2017 Mar 31; 104:133-144. doi: 10.1016/j.ejps.2017.03.044
8. Bove P, Malvindi MA, Kote SS, **Bertorelli R**, Summa M, Sabella. Dissolution test for risk assessment of nanoparticles: a pilot study. *S.Nanoscale.* 2017 Mar 9. doi: 10.1039/c6nr08131b.
 9. Falchi F, Bertozzi SM, Ottonello G, Ruda GF, Colombano G, Fiorelli C, Martucci C, **Bertorelli R**, Scarpelli R, Cavalli A, Bandiera T, Armirotti A. A new kernel-based, partial least squares, QSRR model for UPCL retention time prediction: a useful tool for metabolite identification. *Anal Chem.* 2016 Sep 1. [Epub ahead of print] PMID: 27583774
 10. Romano I, Summa M, Heredia-Guerrero JA, Spanò R, Ceseracciu L, Pignatelli C, **Bertorelli R**, Mele E, Athanassiou A. Fumarate-loaded electrospun nanofibers with anti-inflammatory activity for fast recovery of mild skin burns. *Biomed Mater.* 2016 Aug 2;11(4):041001. doi: 10.1088/1748-6041/11/4/041001. PMID: 27481333
 11. Hadi Hajiali, Maria Summa, Debora Russo, Andrea Armirotti, Virgilio Brunetti, **Rosalia Bertorelli**, Athanassia Athanassiou and Elisa Mele. Alginate–lavender nanofibers with antibacterial and anti-inflammatory activity to effectively promote burn healing- *Journal of Materials Chemistry B.* 2016 DOI: 10.1039/c5tb02174j
 12. Romano I, Ayadi F, Rizzello L, Summa M, **Bertorelli R**, Pompa P, Brandi F, Bayer IS, Athanassiou A. Controlled antiseptic/eosin release from chitosan-based hydrogel modified fibrous substrates. *Carb. Pol* 2015 Oct 20;131:306-14. doi: 10.1016/j.carbpol.2015.05.057. Epub 2015 Jun 3.
 13. Justinova Z, Panlilio LV, Moreno-Sanz G, Redhi GH, Auber A, Secci ME, Mascia P, Bandiera T, Armirotti A, **Bertorelli R**, Chefer SI, Barnes C, Yasar S, Piomelli D, Goldberg SR. Effects of Fatty Acid Amide Hydrolase (FAAH) Inhibitors in Non-Human Primate Models of Nicotine Reward and Relapse. *Neuropsychopharmacology.* 2015 Mar 10. doi: 10.1038/npp.2015.62.
 14. Iorio M, Sasso O, Maffioli SI, **Bertorelli R**, Monciardini P, Sosio M, Bonezzi F, Summa M, Brunati C, Bordoni R, Corti G, Tarozzo G, Piomelli D, Reggiani A, Donadio S. A glycosylated, labionin-containing lanthipeptide with marked antinociceptive activity. *ACS Chem Biol.* 2013 Nov 5.
 15. Capurro V, Busquet P, Lopes JP, **Bertorelli R**, Tarozzo G, Bolognesi ML, Piomelli D, Reggiani A, Cavalli A. Pharmacological characterization of memoquin, a multi-target compound for the treatment of Alzheimer's disease. *PLoS One.* 2013;8(2):e56870.

16. Sasso O, Moreno-Sanz G, Martucci C, Realini N, Dionisi M, Mengatto L, Duranti A, Tarozzo G, Tarzia G, Mor M, **Bertorelli R**, Reggiani A, Piomelli D. Antinociceptive effects of the N-acylethanolamine acid amidase inhibitor ARN077 in rodent pain models. *Pain*. 2013 Mar;154(3):350-60.
17. Busquet P, Capurro V, Cavalli A, Piomelli D, Reggiani A, **Bertorelli R**. Synergistic effects of galantamine and memantine in attenuating scopolamine-induced amnesia in mice. *J Pharmacol Sci*. 2012;120(4):305-9.
18. Brumfield S, Korakas P, Silverman LS, Tulshian D, Matasi JJ, Qiang L, Bennett CE, Burnett DA, Greenlee WJ, Knutson CE, Wu WL, Sasikumar TK, Domalski M, **Bertorelli R**, Grilli M, Lozza G, Reggiani A, Li C. Synthesis and SAR development of novel mGluR1 antagonists for the treatment of chronic pain. *Bioorg Med Chem Lett*. 2012 Dec 1;22(23):7223-6.
19. Moreno-Sanz G, Sasso O, Guijarro A, Oluyemi O., **Bertorelli R**, Reggiani A, Piomelli D., 2012. Pharmacological characterization of the peripheral FAAH inhibitor URB937 in female rodents: interaction with the Abcg2 transporter in the blood-placenta barrier. *Br. J. Pharmacol*. doi: 10.1111/j.1476-5381.2012.02098.x. [Epub ahead of print].
20. Sasso O, **Bertorelli R**, Bandiera T, Scarpelli R, Colombano G, Armirotti A, Moreno-Sanz G, Reggiani A, Piomelli D. Peripheral FAAH inhibition causes profound antinociception and protects against indomethacin-induced gastric lesions. *Pharmacol Res*. 2012 Mar 7.
21. Bennett CE, Burnett DA, Greenlee WJ, Knutson CE, Korakas P, Li C, Tulshian D, Wu WL, **Bertorelli R**, Fredduzzi S, Grilli M, Lozza G, Reggiani A, Veltri A. Fused tricyclic mGluR1 antagonists for the treatment of neuropathic pain. *Bioorg Med Chem Lett*. 2012; 22:1575-8.
22. Fu J, Bottegoni G, Sasso O, **Bertorelli R**, Rocchia W, Masetti M, Guijarro A, Lodola A, Armirotti A, Garau G, Bandiera T, Reggiani A, Mor M, Cavalli A, Piomelli D. A catalytically silent FAAH-1 variant drives anandamide transport in neurons. *Nat Neurosci*. 2011, 10.1038/nn.2986
23. Brumfield S, Matasi JJ, Tulshian D, Czarniecki M, Greenlee W, Garlisi C, Qiu H, Devito K, Chen SC, Sun Y, **Bertorelli R**, Ansell J, Geiss W, Le VD, Martin GS, Vellekoop SA, Haber J, Allard ML. Synthesis and SAR development of novel P2X(7) receptor antagonists for the treatment of pain: Part 2. *Bioorg Med Chem Lett*. 2011, 21:7287-90.
24. Matasi JJ, Brumfield S, Tulshian D, Czarnecki M, Greenlee W, Garlisi CG, Qiu H, Devito K, Chen SC, Sun Y, **Bertorelli R**, Geiss W, Le VD, Martin GS, Vellekoop SA, Haber J, Allard ML. Synthesis and SAR development of

- novel P2X7 receptor antagonists for the treatment of pain: part 1. *Bioorg Med Chem Lett*. 2011, 1:3805-8.
25. Sasikumar TK, Qiang L, Burnett DA, Greenlee WJ, Li C, Heimark I, Pramanik B, Grilli M, **Bertorelli R**, Lozza G, Reggiani A. Tricyclic thienopyridine-pyrimidones/thienopyrimidine-pyrimidones as orally efficacious mGluR1 antagonists for neuropathic pain, *Bioorg Med Chem Lett* 2009, 19:3199-203
 26. Sasikumar TK, Qiang L, Burnett DA, Greenlee WJ, Li C, Grilli M, **Bertorelli R**, Lozza G, Reggiani A A-ring modifications on the triazafluorenone core structure and their mGluR1 antagonist properties. *Bioorg Med Chem Lett*. 2010 Apr 15;20(8):2474-7. doi: 10.1016/j.bmcl.2010.03.004.
 27. Hodgson RA*, **Bertorelli R***, Varty GB, Lachowicz LE, Forlani A, Fredduzzi S, Cohen-Williams ME, Higgins GA, Impagnatiello F, Nicolussi E, Parra LE, Foster C, Zhai Y, Parker EM, Reggiani A, Hunter JC. Characterization of the Potent and Highly Selective A_{2A} Receptor Antagonists SCH 412348 and SCH 420814 in rodent models of movement disorders and depression, *JPET* 2009, 330:294-303. *coauthors
 28. Downey P.M., Petrò R., Simon J.S., Devlin D., Lozza G., Veltri A., Beltramo M., **Bertorelli R.** and Reggiani A. Identification of single nucleotide polymorphisms of the human metabotropic glutamate receptor 1 gene and pharmacological characterization of a P993S variant. *Biochemical Pharmacology* 2009, 77:1246-1253
 29. Neustadt BR, Liu H, Hao J, Greenlee WJ, Stamford AW, Foster C, Arik L, Lachowicz J, Zhang H, **Bertorelli R**, Fredduzzi S, Varty G, Cohen-Williams M, Ng K. Potent and selective adenosine A_{2A} receptor antagonists: 1, 2, 4-Triazolo[1, 5-c]pyrimidines. *Bioorg Med Chem Lett* 2009, 19: 967-71
 30. Wu WL, Burnett DA, Domalski M, Greenlee WJ, Li C, **Bertorelli R**, Fredduzzi S, Lozza G, Veltri A, Reggiani A. Discovery of orally efficacious tetracyclic metabotropic glutamate receptor 1 (mGluR1) antagonists for the treatment of chronic pain. *J Med Chem*. 2007; 50:5550-3.
 31. Neustadt BR, Hao J, Lindo N, Greenlee WJ, Stamford AW, Tulshian D, Ongini E, Hunter J, Monopoli A, **Bertorelli R**, Foster C, Arik L, Lachowicz J, Ng K, Feng KI. Potent, selective, and orally active adenosine A_{2A} receptor antagonists: arylpiperazine derivatives of pyrazolo[4,3-e]-1,2,4-triazolo[1,5-c]pyrimidines. *Bioorg Med Chem Lett* 2007, 17: 1376-138
 32. Silverman LS, Caldwell JP, Greenlee WJ, Kiselgof E, Matasi JJ, Tulshian DB, Arik L, Foster C, **Bertorelli R**, Monopoli A, Ongini E. 3H-[1,2,4]-Triazolo[5,1-i]purin-5-amine derivatives as adenosine A_{2A} antagonists. *Bioorg Med Chem Lett* 2007, 17: 1659-1662.

33. Beltramo M, Bernardini N, **Bertorelli R**, Campanella M, Nicolussi E, Fredduzzi S, Reggiani A. CB2 receptor-mediated antihyperalgesia: possibile direct involvement of neuronal mechanisms. *Eur J Neurosci* 2006, 23: 1530-1538.
34. Varty GB, Grilli M, Forlani A, Fredduzzi S, Grzelak ME, Guthrie DH, Hodgson RA, Lu SX, Nicolussi E, Pond AJ, Parker EM, Hunter JC, Higgins GA, Reggiani A, **Bertorelli R**. The anitnociceptive and anxiolytic-like effects of the metabotropic glutamate receptor 5 (mGluR5) antagonists, MPEP and MTEP, and the mGluR1 antagonist, LY456236, in rodents: a comparison of efficacy and side-effect profiles. *Psychopharmacology* 2005, 179: 207-217.
35. **Bertorelli R**, Fredduzzi S, Tarozzo G, Campanella M, Grundy R, Beltramo M, Reggiani A. Endogenous and exogenous melanocortin antagonists induce anti-allodynic effects in a model of rat neuropathic pain. *Behav Brain Res* 2005, 157:55-62.
36. Bellasio S, Nicolussi E, **Bertorelli R**, Reggiani A. Melanocortin receptor agonists and antagonists modulate nociceptive sensitivity in the mouse formalin test. *Eur J Pharmacol*, 2003, 482: 127-32.
37. Beltramo M, Campanella M, Tarozzo G, Fredduzzi S, Corradini L, Forlani A, **Bertorelli R**, Reggiani A. Gene expression profiling of melanocortin system in neuropathic rats supports a role in nociception, *Brain Res Mol Brain Res*, 2003, 118: 111-8.
38. Gavioli EC, Marzola G, Guerrini R, **Bertorelli R**, Zucchini S, De Lima TC, Rae GA, Salvadori S, Regoli D, Calo' G. Blockade of nociception/orphanin FG-NOP receptor signalling produces antidepressant-like effects: pharmacological and genetic evidences from the mouse forced swimming test. *Eur J Neurosci* 2003, 17: 1987-1990.
39. Melani A, Pantoni L, Bordoni F, Gianfriddo M, Bianchi L, Vannucchi MG, **Bertorelli R**, Monopoli A, Pedata F. The selective A2A receptor antagonist SCH 58261 reduces striatal transmitter outflow, turning behaviour and ischemic brain damage induced by permanent focal ischemia in the rat, *Brain Res*, 2003, 959:243-50.
40. **Bertorelli R**, Bastia E, Citterio F, Corradini L, Forlani A, Ongini E. Lack of the nociceptin receptor does not affect acute or chronic nociception in mice. *Peptides*, 2002, 23:1589-96.
41. Bastia E, Varani K, Monopoli A, **Bertorelli R**. Effects of A(1) and A(2) adenosine receptor ligands in mouse acute models of pain. *Neurosci Lett*, 2002, 328:241-4
42. Briscini L, Corradini L, Ongini E, **Bertorelli R**. Up-regulation of ORL-1 receptors in spinal tissue of allodynic rats after sciatic nerve iniury. *Eur J Pharmacol* 2002, 447:59-65

43. Di Giannuario A, Rizzi A, Pieretti S, Guerrini R, **Bertorelli R**, Salvadori S, Regoli D, Calo G. Studies on the antinociceptive effect of [Nphe1]nociceptin(1-13)NH₂ in mice. *Neurosci Lett* 2001, 316:25-8.
44. El Yacoubi M, Ledent C, Parmentier M, **Bertorelli R**, Ongini E, Costentin J, Vaugeois JM. Adenosine A_{2A} receptor antagonists are potential antidepressants: evidence based on pharmacology and A_{2A} receptor knockout mice. *Br J Pharmacol* 2001, 134: 68-77.
45. Corradini L, Briscini L, Ongini E, **Bertorelli R**. The putative OP(4) antagonist, [Nphe1]nociceptin(1-13)NH₂, prevents the effects of nociceptin in neuropathic rats. *Brain Res*, 2001, 905:127-33.
46. Citterio F, Corradini L, Smith RD, **Bertorelli R**. Nociceptin attenuates opioid and gamma-aminobutyric acid(B) receptor-mediated analgesia in the mouse tail-flick assay. *Neurosci Lett*, 2000, 292:83-6.
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48. **Bertorelli R**, Corradini L, Rafiq K, Tupper J, Calo G, Ongini E. Nociceptin and the ORL-1 ligand [Phe1psi (CH₂-NH)Gly2]nociceptin(1-13)NH₂ exert anti-opioid effects in the Freund's adjuvant-induced arthritic rat model of chronic pain. *Br J Pharmacol*, 1999, 128:1252-8.
49. Melani A, Pantoni L, Corsi C, Bianchi L, Monopoli A, **Bertorelli R**, Pepeu G, Pedata F. Striatal outflow of adenosine, excitatory amino acids, gamma-aminobutyric acid, and taurine in awake freely moving rats after middle cerebral artery occlusion: correlations with neurological deficit and histopathological damage. *Stroke*, 1999, 30:2448-55.
50. De Sarro G, De Sarro A, Di Paola ED, **Bertorelli R**. Effects of adenosine receptor agonists and antagonists on audiogenic-seizure-sensible DBA/2 mice. *Eur J Pharmacol*, 1999, 371:137-45.
51. **Bertorelli R**, Adami M, Di Santo E, Ghezzi P. MK801 and dexamethasone reduce both tumor necrosis factor levels and infarct volume after focal cerebral ischemia in the rat brain. *Neurosci Lett*, 1998, 246:41-4.
52. Di Santo E, Adami M, **Bertorelli R**, Ghezzi P. Systemic interleukin 10 administration inhibits brain tumor necrosis factor production in mice. *Eur J Pharmacol*, 1997, 336: 197-202.
53. Ongini E, Adami M, Ferri C, **Bertorelli R**. Adenosine A_{2A} receptors and neuroprotection. *Ann NY Acad Sci*, 1997, 825: 30-48.

54. De Sarro G, Ongini E, **Bertorelli R**, Aguglia U, De Sarro A. Anticonvulsant activity of 5,7DCKA, NBQX, and felbamate against some chemoconvulsants in DBA/2 mice. *Pharmacol Biochem Behav*, 1996, 55:281-7.
55. **Bertorelli R**, Smirne S, Adami M, de Rino F, Iannaccone S. Neuroprotective effects of felbamate on global ischemia in Mongolian gerbils. *Pharmacol res*, 1996, 43:59-64.
56. **Bertorelli R**, Ferri N, Adami M, Ongini E. Effects of four antiepileptic drugs on sleep and waking in the rat under both light and dark phases. *Pharmacol Biochem Behav*, 1999, 53:559-65.
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58. **Bertorelli R**, Adami M, Ongini E. The Mongolian gerbil in experimental epilepsy. *Ital J Neurol Sci*, 1995, 16:101-6
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60. Consolo S, **Bertorelli R**, Russi G, Zambelli M, Ladinsky H. Serotonergic facilitation of acetylcholine release in vivo from rat dorsal hippocampus via serotonin 5-HT₃ receptors. *J Neurochem* 1994, 62: 2254-2261.
61. Girotti P, **Bertorelli R**, Fisone G, Land T, Langel U, Consolo S, Bartfai T. N-terminal galanin fragments inhibit the hippocampal release of acetylcholine in vivo, *Brain Res*, 1993: 612:258-62.
62. Charpentier N, Prézeau L, Carrette J, **Bertorelli R**, Le Cam G, Manzoni O, Bockaert J, Homburger V. Transfected Go1 alpha inhibits the calcium dependence of beta-adrenergic stimulated cAMP accumulation in C6 glioma cells. *J Biol Chem*. 1993, 25;268:8980-9.
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66. Bartfai T, Bedecs K, Land T, Langel U, **Bertorelli R**, Girotti P, Consolo S, Xu XJ, Wiesenfeld-Hallin Z, Nilsson S, et al. M-15: high affinity chimeric peptide that blocks the neuronal actions of galanin in the hippocampus, locus coeruleus, and spinal cord. *Proc Natl Acad Sci USA*, 1991;88:10961-5.
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PATENTS

Title: The use of 1,2,4-Triazolo(1,5-c) pyrimidine heterocyclic analogues for the preparation of medicaments useful for the treatment of cerebrovascular disturbances

Inventors: Ongini Ennio, Adami Marina, **Bertorelli Rosalia**

Title: Novel Lantipeptide

Inventors: Iorio Marianna, Maffioli Sonia, Monciardini Palo, Sosio margherita, Donadio Stefano, **Bertorelli Rosalia**, Sasso Oscar, Reggiani Angelo.