

Curriculum Vitae

Name: Ferdinando Nicoletti

Number of publications in peer-reviewed Journals: 578

Education and Academic Career

November 1982: Graduation in Medicine at University of Catania, School of Medicine (Italy) cum laude. Title of dissertation: “Effects of sex hormones and prolactin on the extrapyramidal motor system”.

December 1982 – December 1983: Postdoctoral Fellow, Institute of Pharmacology, University of Catania, School of Medicine (Head, Prof. Umberto Scapagnini).

January 1984- October 1985: Postdoctoral Fellow, Laboratory of Preclinical Pharmacology, NIMH, St. Elizabeth’s Hospital, Washington D.C., USA (Head, Prof. Erminio Costa).

November 1985-January 1987: Visiting Assistant Professor of Pharmacology, Georgetown University, School of Dentistry, Washington D.C., USA. (Head, Prof. Erminio Costa at the FIDIA Georgetown Institute for Neuroscience).

1987 – 1992: Research Associate, Institute of Pharmacology, University of Catania, School of Medicine (Head, Prof. Umberto Scapagnini).

1 July 1987: Specialist in Neurology (with laude). Title of dissertation: “Signal transduction coupled to excitatory amino acid receptors in cultured cerebellar granule cells”.

November 1992 – October 1995: Associate Professor of Pharmacology, University of Perugia, School of Pharmacy.

November 1995 – October 2000: Associate Professor of Pharmacology, University of Catania, School of Pharmacy.

January 1996 to date: Director of the Lab of Molecular Neuropharmacology, IRCCS Neuromed, Pozzilli (IS), Italy.

October 2000 to date: Full Professor of Pharmacology, University Sapienza of Rome School of Medicine.

Current positions: Full Professor of Pharmacology, University Sapienza of Rome School of Medicine; Head of the Lab of Molecular Neuropharmacology, IRCCS Neuromed, Pozzilli, Italy; Director of the Residence School in Clinical Pharmacology and Toxicology, University of Rome “Sapienza”; Research Supervisor of the Prenatal Stress Team, Glycobiology Unit, University of Lille 1, France.

Main achievements

- 1) Discovery of metabotropic glutamate receptors (shared with the French group of Joel Bockaert in Montpellier).
- 2) Indicated as one of the 4 young (<41 years) leading European Neuroscientists in 1992 (Science, April 24, pag. 471, 1992).

- 3) Top world scientist in the field of metabotropic glutamate receptors (Biomed Experts; first position in 2011 and 2012; second position in 2013).
- 4) Honorary member of the Medical Academy of Rome; Honorary Member of the “Gioenia Academy” of Catania.
- 5) Recipient of the Ruffolo’s Award to the Career by the American Society for Pharmacology and Experimental Therapeutics (San Diego, CA, April 26, 2014).

Fundings

2014 Agenzia Spaziale Italiana “Study on the effects of chronic hypoxia on mood and anxiety” HYPOX - AIR”.

ERA-Net NEURON 2012 (NEURON3-387-092 of the European Community): “Deciphering the role of peripheral and central nervous system metabotropic glutamate receptors in neuropathic pain with photoactivable ligands”. Partners: Amadeu Llebaria (Barcelona, Spain); Jesus Giraldo (Bellaterra, Spain); Francisco Cirulea (Barcelona, Spain); Jean-Philippe Pin (Montpellier, France)

ANR 2008 “ERA-Net NEURON” (Contract ANR-08-NEUR-006-01 of the European Community) “mGluRpatho: from new molecules to therapeutic development for the treatment of Parkinson’s disease”. Partners: Marianne Amalric (Marseilles, France); Jean-Philippe Pin (Montpellier, France); Francine Acher (Paris, France); Giulberto Fisone (Stockholm, Sweden).

Brain Damage and Nitric Oxide” (in collaboration with Tadeusz Wieloch –University of Lund-, John Garthwaite - Cruciform Project, London- ed. Ole P. Ottersen – University of Oslo -) BIOMED 2 of European Commission, PL 950851, BMH4-CT96-0851).

“Quality of life and management of living resources”, call identifier: 1999/C64/13, N° of the proposition: QLAM-1999-00074.

Telethon 1999, project n° 1238 in collaboration with Dr. Antonio De Blasi (Istituto Mario Negri Sud) entitled: “Molecular Determinants of Metabotropic Glutamate Receptor Signalling in Cerebellar Motor Disorders”.

Telethon 2007, project n° GGP07264A in collaboration with Dr. Maria Vincenza Catania (CNR, Italy) entitled: “Involvement of group-I metabotropic glutamate receptors in the pathophysiology of Fragile X syndrome”.

Projects funded by the Italian Ministry of University and Scientific Research: MIUR (Italian Ministry of Education, University, and Research): PRIN projects: “Glial-neuronal interactions in mechanisms of neurodegeneration and neuroprotection (1999-2001 and 2004-2006); “Metabotropic glutamate receptors as targets for neuroprotective drugs” (2007-2009). FIRB projects: RBNE017555_004 “Metabotropic glutamate receptors as therapeutic targets for neurodegeneration associated with movement disorders” (2001-2003); RBNE017555_010 “Mechanisms of neuronal vulnerability: identification of new biological targets for the development of innovative therapies” (2001-2003); RBNE01PZER_009 “Identification of

signaling pathways involved in molecular repair and functional recovery of post-mitotic cells” (2001-2003). Project MIUR/IRCCS: prot. 200728AA57 “Metabotropic glutamate receptor subtypes as targets for neuroprotective agents”; prot. 2006055178 “Distinct role of mGlu2 and mGlu3 metabotropic glutamate receptors in neurodegeneration/neuroprotection”; prot. 2004052809 “Mechanisms of neurodegeneration and neuroprotection based on glial- neuronal interactions in cellular and animal models of chronic neurodegenerative disorders”; prot. 2003054393 “Metabotropic glutamate receptors as targets for drugs of potential use in the treatment of parkinsonism”; prot. 2002052298 “Metabotropic glutamate receptors as novel "targets" for drugs of potential application in the treatment of parkinsonism”.

Teaching Activity

Ferdinando Nicoletti is a Professor of Medical Pharmacology at the University Sapienza of Rome School of Medicine. He covers the whole field of Pharmacology, teaching pharmacodynamics and pharmacokinetics in the 3rd year, antibiotics, pharmacology of the urinary apparatus, pharmacology of the gastrointestinal system, pharmacology of the cardiovascular system, endocrine pharmacology, pharmacology of the respiratory system, and anti-inflammatory and immunosuppressive drugs in the 4th year, and neuropharmacology and drugs of abuse in the 5th year of the Medical School. He is the Director of the Residence School in Medical Pharmacology at the University of Sapienza, Rome, and the President of “Corso di laurea” in Biomedical Lab Techniques at the University Sapienza (“Polo Molise”, Neuromed Institute).

International Teaching

2006, September 2-7: Faculty of the International Summer School: "The Brain Plasticity in life span" at the University of Lille 1, (Lille, France). Label MJENR European Summer School (60h TD).

2007, September 5-11: Faculty of the Second International Summer School: "Advanced courses in Neurosciences" (University of Lille1 and Sapienza University of Rome. “Accord cadre” between the 2 Universities. “Label PENS-Blackwell Summer School 2007”.

Partnerships or collaborations with Drug Companies

GSK, Verona, Italy: development of mGlu receptor ligands; characterization of the role of mGlu2 and mGlu3 receptors in mechanisms of neurodegeneration/neuroprotection.

Lundbeck, Milan, Italy: Development of memantin in the treatment of Alzheimer’s disease.

Eli Lilly, Indianapolis, USA: the study of mGlu2 and mGlu3 receptor ligands in acute and chronic neurodegenerative disorders.

Roche, Basel, Switzerland: Development of mGlu1 receptor enhancers.^[1]_{SEP}Novartis Pharma, Basel, Switzerland: Development of mGlu4 and mGlu5 receptor ligands.

Novartis Pharma, Milan, Italy: Development of fingolimod in the treatment of multiple sclerosis.

Pfizer, Italy: Development of pregabalin in the treatment of chronic pain and generalized anxiety disorder.

Servier, Paris, France: development of agomelatine in the treatment of major depression.

Sigma-Tau, Pomezia, Italy, Biofutura, Milan, and Alfa-Sigma Bologna: Characterization of the mechanism of action of L-Acetylcarnitine in the CNS.

Member of scientific societies

Italian Society of Pharmacology, ^[1]_{SEP} Italian Society of Neuropsychopharmacology, Italian Society of Drug Addiction American Society for Neuroscience

Organization of international meetings

Organizer of ten International Meetings on Metabotropic Glutamate Receptors (1993 – 1996 – 1999 – 2002 – 2005 – 2008 – 2011 – 2014 – 2017 - 2021). These Meetings have been the launching platform for studies on mGlu receptors in the last 27 years.

Referee Activity

Neuropharmacology, Proceedings of the National Academy of Science USA, Journal of Neurochemistry, Journal of Neuroscience, Neuroscience, Journal of Pharmacology and Experimental Therapeutics, Molecular Pharmacology, Pain, Molecular Pain, Molecular Brain, FASEB Journal, Life Science, Brain Research, Trends in Neuroscience, Pharmacological Research Communication, Nature Communication, Pharmacological Reviews, Molecular Psychiatry, Biological Psychiatry, Neuropsychopharmacology. Editor-in-Chief of Current Neuropharmacology. Editor of Neuropharmacology and Molecular Brain.

Administrative activities

Past member of the “Tavolo di Neuroscienze Cliniche” (Committee of Clinical Neuroscience) of AIFA (Agenzia Italiana del Farmaco), Italy. In addition, he is the Italian Representative of LIA (international associated laboratory) including Sapienza University, Neuromed Institute, and the University of Lille (France). Current member of the InternatioCommitteeitte of the European Commission for the evaluation of the ERC project (excellence research project – the only Italian member in the field of Neurosciences).

Member of CNBBSV (Italian Committee of Biosafety, Biotechnology, and Life Sciences of the Presidency of the Council of Ministers) from 2016 to date.

List of Publications (h-index = 90; Citations = 20334)

1: Nicoletti F, Di Giorgio RM, Patti F, Rampello L, Condorelli DF, Amico-Roxas M, Canonico PL, Scapagnini U. Influence of hyperprolactinemia induced byadenopituitary transplantation under the kidney capsule on the glutamic acid decarboxylase activity in various brain regions. Arch Int Pharmacodyn Ther. 1981 Jan;249(1):153-7. PubMed PMID: 7224717.

2: Rampello L, Nicoletti F, Patti F, Condorelli DF, Drago F, Maugeri S, Prestifilippo N, Patané C, Reggio A, Raffaele R. [Evaluation of motor behavior in hyperprolactinemic conditions]. Acta Neurol Quad (Napoli). 1981;42:297-301. Italian. PubMed PMID: 7270066.

3: Di Giorgio RM, Nicoletti F, Amico-Roxas M, Patti F, Rampello L, Giammona G, Condorelli DF, Pennisi MG. [Influence of the central dopaminergic system on GABAergic

activity of the cerebellum. Preliminary results]. *Acta Neurol Quad (Napoli)*. 1981;42:302-4. Italian. PubMed PMID: 7270068.

4: Rampello L, Nicoletti F, Patti F, Condorelli DF, Drago F, Maugeri S, Prestifilippo N, Patanè C, Reggio A, Raffaele R. [Evaluation of motor behavior in conditions of hyperprolactinemia]. *Acta Neurol (Napoli)*. 1981 Feb;3(1):297-301. Italian. PubMed PMID: 7246307.

5: Di Giorgio RM, Nicoletti F, Amico-Roxas M, Patti F, Rampello L, Giammona G, Condorelli DF, Pennisi MG. [Influence of the central dopaminergic system on GABAergic activity of the cerebellum. Initial results]. *Acta Neurol (Napoli)*. 1981 Feb;3(1):302-4. Italian. PubMed PMID: 7246308.

6: Patti F, Maccagnano C, Panico AM, Giammona G, Rampello L, Reggio A, Di Giorgio RM, Nicoletti F. Effects of dantrolene sodium on gabaergic activity in spinal cord, corpus striatum, substantia nigra and cerebral cortex in rat. *Acta Neurol (Napoli)*. 1981 Apr;3(2):384-8. PubMed PMID: 7304279.

7: Prato A, Clementi G, Nicoletti F, Canonico PL, Patti F, Condorelli DF, di Giorgio RM, Drago F. Possible role of prolactin in the modification of medial basal hypothalamic glutamic acid decarboxylase activity. *Eur J Pharmacol*. 1981 Apr 24;71(1):169-72. PubMed PMID: 7238586.

8: Patti F, Giammona G, Nicoletti F, Condorelli DF, Rampello L, Reggio A, Di Giorgio RM. Apomorphine and cerebellar GAD activity. *Acta Neurol (Napoli)*. 1981 Aug;3(4):599-601. PubMed PMID: 7304291.

9: Condorelli DF, Giammona G, Patti F, Nicoletti F, Rampello L, Reggio A, Matera M, Di Giorgio RM. Effects of different doses of apomorphine on GAD activity in rat substantia nigra. *Ital J Neurol Sci*. 1981 Aug;2(3):303-6. PubMed PMID: 7341553.

10: Rampello L, Giammona G, Patti F, Reggio A, Nicoletti F, Di Giorgio RM, Condorelli DF. Effects of chronic haloperidol and sulpiride treatment on rat nigral GABA content. *Boll Soc Ital Biol Sper*. 1981 Aug 15;57(15):1608-11. PubMed PMID: 7306401.

11: Reggio A, Giammona G, Patti F, Condorelli DF, Rampello L, Nicoletti F, Canonico PL, Di Giorgio RM. Effect of 5 days reserpine treatment on the cerebellar GABAergic system. *Acta Neurol (Napoli)*. 1981 Oct;3(5):687-9. PubMed PMID: 7315566.

12: Nicoletti F, Patti F, Condorelli DF, Rampello L, Giammona G, Di Giorgio RM, Canonico PL, Scapagnini U. Comparative effects of chronic haloperidol and sulpiride treatment on nigral and striatal GABA content. *J Neurochem*. 1981 Oct;37(4):1048-51. PubMed PMID: 7320718.

13: Giammona G, Patti F, Sambataro V, Reggio A, Rampello L, Di Giorgio RM, Maccagnano C, Condorelli DF, Nicoletti F. [Effects of different doses of apomorphine on the glutamate decarboxylase activity of the substantia nigra and the medial basal hypothalamus]. *Boll Soc Ital Biol Sper*. 1981 Oct 30;57(20):2074-9. Italian. PubMed PMID: 7317201.

14: Scapagnini U, Canonico PL, Nicoletti F, Patti F, Fiore L, Tigano G, Clementi G, Gessa GL. Hormonal interference in experimental models of depression. *Adv Biochem Psychopharmacol*. 1982;32:281-7. PubMed PMID: 7090897.

15: Rampello L, Patti F, Condorelli DF, Reggio A, Prato A, Canonico PL, Nicoletti F. Effects of some typical and atypical antidepressants on GAD activity in various brain regions. *Encephale*. 1982;8(1):89-94. PubMed PMID: 7094872.

16: Scapagnini U, Canonico PL, Patti F, Condorelli DF, Nicoletti F. Possible involvement of prolactin in sulpiride-induced changes in nigral and striatal GAD activity. *Ann Ist Super Sanita*. 1982;18(1):27-9. PubMed PMID: 7171172.

17: Nicoletti F, Canonico PL, Patti F, Rampello L, Condorelli DF, Giammona G, Di Giorgio RM, Scapagnini U. Sulpiride effects on nigral and striatal glutamic acid decarboxylase activity: a possible involvement of prolactin. *Eur J Pharmacol*. 1982 Jan 22;77(2-3):131-5. PubMed PMID: 7060633.

18: Nicoletti F, Patti F, Ferrara N, Canonico PL, Giammona G, Condorelli DF, Scapagnini U. Comparative effects of estrogens and prolactin on nigral and striatal GAD activity. *Brain Res*. 1982 Jan 28;232(1):238-41. PubMed PMID: 7055706.

19: Tigano G, Marano P, Patti F, Cammarata C, De Simone D, Rampello L, Nicoletti F. [Modification of the nigro-striatal system by estrogens and prolactin. Clinical and experimental data]. *Boll Soc Ital Biol Sper*. 1982 Aug 30;58(16):1054-60. Italian. PubMed PMID: 7138674.

20: Nicoletti F, Clementi G, Patti F, Canonico PL, Di Giorgio RM, Matera M, Pennisi G, Angelucci L, Scapagnini U. Effects of calcitonin on rat extrapyramidal motor system: behavioral and biochemical data. *Brain Res*. 1982 Nov 4;250(2):381-5. PubMed PMID: 6293644.

21: Nicoletti F, Imperato A, Canonico PL, Piacente B, Raffaele R, Scapagnini U, Di Chiara G. Motor and postural effects of kainic acid or GABA agonist and antagonist injection into the cerebellar nucleus fastigii. *Birth Defects Orig Artic Ser*. 1983;19(4):525-7. PubMed PMID: 6307416.

22: Lo Menzo G, Patti F, Giammona G, Nicoletti F, Di Giorgio RM, Saitta B. Aminoacid concentration in ante-mortem and post-mortem wounds. *Acta Med Leg Soc (Liege)*. 1983;33(2):1173-9. PubMed PMID: 6613670.

23: Clementi G, Prato A, Bernardini R, Nicoletti F, Patti F, De Simone D, Scapagnini U. Effects of calcitonin on the brain of aged rats. *Neurobiol Aging*. 1983 Fall;4(3):229-32. PubMed PMID: 6686863.

24: Nicoletti F, Clementi G, Prato A, Canonico PL, Rampello L, Patti F, Di Giorgio RM, Scapagnini U. Effects of hyper- and hypoprolactinemia on glutamate decarboxylase activity in medial basal hypothalamus of male rat. *Neuroendocrinology*. 1983;36(1):13-6. PubMed PMID: 6828202.

25: Patti F, Giammona G, Rampello L, Reggio A, Gallitto G, Nicoletti F. Antidyskinetic properties of estrogens. *Boll Soc Ital Biol Sper*. 1983 Jan 31;59(2):213-9. PubMed PMID: 6683099.

26: Clementi G, Nicoletti F, Patacchioli F, Prato A, Patti F, Fiore CE, Matera M, Scapagnini U. Hypoprolactinemic action of calcitonin and the tuberoinfundibular dopaminergic system. *J Neurochem*. 1983 Mar;40(3):885-6. PubMed PMID: 6827284.

- 27: Nicoletti F, Clementi G, Patti F, Prato A, De Giorgio RM, Scapagnini U. Effects of parathyroid hormone or haloperidol-induced catalepsy and nigral GAD activity. *Eur J Pharmacol.* 1983 Mar 18;88(1):135-6. PubMed PMID: 6682781.
- 28: Foti D, Patti F, Reggio A, Speciale C, Marano P, Rampello L, Imperato A, Nicoletti F. [Motor and postural effects in intracerebellar injection of kainic acid: possible role of the bulbar reticular formation]. *Boll Soc Ital Biol Sper.* 1983 Mar 30;59(3):373-6. Italian. PubMed PMID: 9704138.
- 29: Sortino MA, Patti F, Rampello L, Foti D, Tigano G, Giammona G, Nicoletti F. [Role of the amygdala in the sedation induced by low doses of apomorphine]. *Boll Soc Ital Biol Sper.* 1983 May 30;59(5):686-9. Italian. PubMed PMID: 6683970.
- 30: Nicoletti F, Drago F, Speciale C, Kovacs LG, Scapagnini U. Role of prolactin-opiate interactions in the central regulation of pain threshold. *Cephalalgia.* 1983 Aug;3 Suppl 1:31-4. PubMed PMID: 6311424.
- 31: Nicoletti F, Patti F, Marano P, Condorelli DF, Scarzella L, Bergamasco B, Marino V, Reggio A, Scapagnini U. Effects of salmon calcitonin administration on spontaneous or neuroleptically-induced dyskinesias. *Acta Neurol (Napoli).* 1983 Oct;5(5):380-4. PubMed PMID: 6140825.
- 32: Millia C, Nicoletti F, Grasso AA, Patti F, Condorelli DF, Rapisarda E, Rampello L, Costa G, Scapagnini U. Effects of dopaminergic drugs on cerebellar prostaglandin concentrations. *J Neurochem.* 1983 Oct;41(4):1190-1. PubMed PMID: 6578301.
- 33: Nicoletti F, Ferrara N, Patti F, Viglianesi M, Rampello L, Bianchi A, Reggio A, Scapagnini U. Influence of sex steroids and prolactin on haloperidol-induced catalepsy. *Brain Res.* 1983 Nov 21;279(1-2):352-8. PubMed PMID: 6315179.
- 34: Imperato A, Nicoletti F, Diana M, Scapagnini U, Di Chiara G. Fastigial influences on postural tonus as studied by kainate lesions and by local infusion of GABAergic drugs in the rat. *Brain Res.* 1984 Mar 12;295(1):51-63. PubMed PMID: 6370373.
- 35: Clementi G, Amico-Roxas M, Nicoletti F, Fiore EC, Prato A, Scapagnini U. Hyperalgesic activity of parathyroid hormone and its fragments in male rats. *Brain Res.* 1984 Mar 19;295(2):376-7. PubMed PMID: 6713198.
- 36: Nicoletti F, Perciavalle V, Berretta S, Speciale C, Polizzi MC, Patti F, De Simone D, Sortino MA, Di Giorgio RM, Scapagnini U. Altered time course of changes in the hippocampal concentration of excitatory and inhibitory amino acids during kainate-induced epilepsy. *Eur J Pharmacol.* 1984 Aug 3;103(1-2):133-7. PubMed PMID: 6479226.
- 37: Caruso G, Marano P, Patti F, De Simone D, Raffaele R, Giammona G, Nicoletti F. [Effects of systemic administration of kainic acid on GABAergic and glutaminergic transmission in various areas of the brain]. *Boll Soc Ital Biol Sper.* 1984 Sep 30;60(9):1715-20. Italian. PubMed PMID: 6098285.
- 38: Ferrara N, Bernardini R, Nicoletti F, Drago F, Matera M, Ceravolo A, Scapagnini U. Prolactin influences sexual behavior during aging. *J Endocrinol Invest.* 1985;8 Suppl 2:23-32. PubMed PMID: 4031395.

- 39: Patti F, Marano P, Nicoletti F, Giammona G, Nicoletti F. Generalized and focal dystonic syndromes: possible therapy with salmon calcitonin. *Eur Neurol.* 1985;24(6):386-91. PubMed PMID: 4065158.
- 40: Ravizza L, Nicoletti F, Pozzi O, Barbaccia ML. Repeated daily treatments with estradiol benzoate increase the [3H]imipramine binding in male rat frontal cortex. *Eur J Pharmacol.* 1985 Jan 8;107(3):395-6. PubMed PMID: 3979431.
- 41: Nicoletti F, Grandison L, Meek JL. Effects of repeated administration of estradiol benzoate on tubero-infundibular GABAergic activity in male rats. *J Neurochem.* 1985 Apr;44(4):1217-20. PubMed PMID: 3973612.
- 42: Nicoletti F, Meek JL. Estradiol benzoate decreases nigral GABAergic activity in male rats. *Brain Res.* 1985 Apr 15;332(1):179-83. PubMed PMID: 2986760.
- 43: Nicoletti F, Speciale C, Sortino MA, Summa G, Caruso G, Patti F, Canonico PL. Comparative effects of estradiol benzoate, the antiestrogen clomiphene citrate, and the progestin medroxyprogesterone acetate on kainic acid-induced seizures in male and female rats. *Epilepsia.* 1985 May-Jun;26(3):252-7. PubMed PMID: 3159567.
- 44: Wroblewski JT, Nicoletti F, Costa E. Different coupling of excitatory amino acid receptors with Ca²⁺ channels in primary cultures of cerebellar granule cells. *Neuropharmacology.* 1985 Sep;24(9):919-21. PubMed PMID: 2414684.
- 45: Nicoletti F, Speciale C, Sortino MA, Panetta MS, Di Giorgio RM, Canonico PL. Estrogen effects on nigral glutamic acid decarboxylase activity: a possible role for catecholesterol. *Eur J Pharmacol.* 1985 Sep 24;115(2-3):297-300. PubMed PMID: 2998827.
- 46: Nicoletti F, Barbaccia ML, Iadarola MJ, Pozzi O, Laird HE 2nd. Abnormality of alpha 1-adrenergic receptors in the frontal cortex of epileptic rats. *J Neurochem.* 1986 Jan;46(1):270-3. PubMed PMID: 2999335.
- 47: Nicoletti F, Meek JL, Iadarola MJ, Chuang DM, Roth BL, Costa E. Coupling of inositol phospholipid metabolism with excitatory amino acid recognition sites in rat hippocampus. *J Neurochem.* 1986 Jan;46(1):40-6. PubMed PMID: 2866236.
- 48: Patti F, Drago F, Marano P, Nicoletti F, Scapagnini U. Effect of sulpiride on chronic abstinence syndrome in addicted patients. *Clin Neuropharmacol.* 1986;9(5):469-76. PubMed PMID: 3021324.
- 49: Nicoletti F, Iadarola MJ, Wroblewski JT, Costa E. Excitatory amino acid recognition sites coupled with inositol phospholipid metabolism: developmental changes and interaction with alpha 1-adrenoceptors. *Proc Natl Acad Sci U S A.* 1986 Mar;83(6):1931-5. PubMed PMID: 2869493; PubMed Central PMCID: PMC323198.
- 50: Nicoletti F, Wroblewski JT, Iadarola MJ, Costa E. Serine-O-phosphate, an endogenous metabolite, inhibits the stimulation of inositol phospholipid hydrolysis elicited by ibotenic acid in rat hippocampal slices. *Neuropharmacology.* 1986 Mar;25(3):335-8. PubMed PMID: 3084992.
- 51: Patti F, Scapagnini U, Nicoletti F, Prato A, Millia C, Clementi G. Calcitonin and migraine. *Headache.* 1986 Apr;26(4):172-4. PubMed PMID: 3710770.

52: Iadorola MJ, Nicoletti F, Naranjo JR, Putnam F, Costa E. Kindling enhances the stimulation of inositol phospholipid hydrolysis elicited by ibotenic acid in rat hippocampal slices. *Brain Res.* 1986 May 21;374(1):174-8. PubMed PMID: 3719324.

53: Patti F, Nicoletti F, Marano P, Nicoletti F. [Modulation of the central nervous system by steroid hormones: effects on convulsions induced by kainic acid in rats of both sexes]. *Acta Neurol (Napoli).* 1986 Jun;8(3):187-92. Italian. PubMed PMID: 2943145.

54: Patti F, Nicoletti F, Marano P, Nicoletti F. [Modulation of the central nervous system by steroid hormones: effects of ethinyl estradiol in idiopathic dyskinesias]. *Acta Neurol (Napoli).* 1986 Jun;8(3):193-7. Italian. PubMed PMID:3739764.

55: Nicoletti F, Wroblewski JT, Novelli A, Alho H, Guidotti A, Costa E. The activation of inositol phospholipid metabolism as a signal-transducing system for excitatory amino acids in primary cultures of cerebellar granule cells. *J Neurosci.* 1986 Jul;6(7):1905-11. PubMed PMID: 3016212.

56: Patti F, Marano P, Giammona G, Rampello L, De Simone D, Nicoletti F. [New treatment strategies in the drug withdrawal of heroin addicts]. *Acta Neurol(Napoli).* 1986 Aug;8(4):447-54. Italian. PubMed PMID: 3776725.

57: Nicoletti F, Wroblewski JT, Novelli A, Guidotti A, Costa E. Excitatory amino acid signal transduction in cerebellar cell cultures. *Funct Neurol.* 1986 Oct-Dec;1(4):345-9. PubMed PMID: 2886406.

58: Novelli A, Nicoletti F, Wroblewski JT, Alho H, Costa E, Guidotti A. Excitatory amino acid receptors coupled with guanylate cyclase in primary cultures of cerebellar granule cells. *J Neurosci.* 1987 Jan;7(1):40-7. PubMed PMID: 2879898.

59: Nicoletti F, Wroblewski JT, Costa E. Magnesium ions inhibit the stimulation of inositol phospholipid hydrolysis by endogenous excitatory amino acids in primary cultures of cerebellar granule cells. *J Neurochem.* 1987 Mar;48(3):967-73. PubMed PMID: 2879893.

60: Patti F, Scapagnini U, Nicoletti F, Prato A, Rapisarda E, Guarcello V, Clementi G. A short-term trial of an analogue of eel-calcitonin in headache. *Headache.* 1987 Jun;27(6):334-9. PubMed PMID: 3654190.

61: Wroblewski JT, Nicoletti F, Fadda E, Costa E. Phencyclidine is a negative allosteric modulator of signal transduction at two subclasses of excitatory amino acid receptors. *Proc Natl Acad Sci U S A.* 1987 Jul;84(14):5068-72. PubMed PMID: 3037532; PubMed Central PMCID: PMC305248.

62: Nicoletti F, Wroblewski JT, Alho H, Eva C, Fadda E, Costa E. Lesions of putative glutamatergic pathways potentiate the increase of inositol phospholipid hydrolysis elicited by excitatory amino acids. *Brain Res.* 1987 Dec 8;436(1):103-12. PubMed PMID: 2891413.

63: Nicoletti F, Wroblewski JT, Fadda E, Costa E. Pertussis toxin inhibits signal transduction at a specific metabotropic glutamate receptor in primary cultures of cerebellar granule cells. *Neuropharmacology.* 1988 Jun;27(6):551-6. PubMed PMID: 2843781.

64: Nicoletti F, Valerio C, Pellegrino C, Drago F, Scapagnini U, Canonico PL. Spatial learning potentiates the stimulation of phosphoinositide hydrolysis by excitatory amino acids

in rat hippocampal slices. *J Neurochem.* 1988 Sep;51(3):725-9. PubMed PMID: 2900874.

65: Canonico PL, Favit A, Catania MV, Nicoletti F. Phorbol esters attenuate glutamate-stimulated inositol phospholipid hydrolysis in neuronal cultures. *J Neurochem.* 1988 Oct;51(4):1049-53. PubMed PMID: 2901459.

66: Condorelli DF, Ingrao F, Magri G, Bruno V, Nicoletti F, Avola R. Activation of excitatory amino acid receptors reduces thymidine incorporation and cell proliferation rate in primary cultures of astrocytes. *Glia.* 1989;2(1):67-9. PubMed PMID: 2565288.

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