

Marco Diana
Curriculum Vitae

Birthdate:
Birthplace:
Nationality:
Marital status:

Education

1975 Scientific baccalaureate
1982 M.D. Degree in Medicine and Surgery, Università di Cagliari
1992 Specialization in Toxicology, Università di Cagliari
2014 Ph.D. in Neuroscience and Behavioral disorders, Università di Palermo.

1980-1982 Medical student, Istituto di Farmacologia, Cattedra di Tossicologia, Facoltà di
Medicina, Università di Cagliari. Director: Prof. G. Di Chiara.
1982-1985 Post-doctoral fellow, Istituto di Farmacologia, Facoltà di Farmacia, Università di
Cagliari. Direttore: Prof. G. Di Chiara.
1985-1986 Post-doctoral Fellow, Dept. of Clin. Pharmacol., Univ. del Colorado H.S.C., Denver
Colorado. U.S.A. Supervisor: Prof. Alan S. Nies.
1986
(Feb-Aug) Visiting professor, Instituto de Physiologia
Cellular, U.N.A.M., Mexico City Mexico.
Supervisor: Prof. R.R. Drucker-Colin.
1987 Researcher. Dip. di Neuroscienze Univ. di Cagliari. Director: Prof. G.L. Gessa.
1987-1989 Post-doctoral Psychobiologist, Dip. Of Psychiatry, Univ. California San Diego,
California, USA Supervisor: Prof. P.M. Groves.
1990-1992 Consultant, Dip di Neuroscienze, Univ. di Cagliari, Director: Prof: G.L. Gessa.
1993-1994 Visiting Professor, Dip di Neuroscienze, Univ. di Cagliari, Director: Prof. W. Fratta.
1994-1999 Assistant Professor of Pharmacology, Dip. Di Scienze del Farmaco, Univ. di Sassari,
Director: Prof. G. Minardi.
1999-2003 Associate Professor of Pharmacology, Dip. Di Scienze del Farmaco, Univ. di Sassari.
2003-2008 (Idoneo) Full Professor of Pharmacology. Dip. Di Scienze del Farmaco, Univ. di
Sassari.
2008-2013 Associate Professor of Pharmacology, Dip. Di Chimica E farmacia, Univ. di Sassari.
2014-2018 (Abilitato) Full Professor of Pharmacology
2018-present Full Professor of Pharmacology

Languages: English, French, Spanish, Italian.

Membership in Professional Societies:

- Italian Society of Pharmacology.
- Italian Society of Neuroscience.
- Italian Society for Drug Addiction (SITD).
- International Basal Ganglia Society (IBAGS).
- International Brain Research Organization (IBRO).
- International Drug Abuse Research Society (IDARS)
- Society for Neuroscience (SfN).
- Mediterranean Neuroscience Society

Biographical sketch

The scientific activity of Marco Diana has been, for the most part, in the field of the neurobiological effects of drugs of abuse on different neuronal systems such as dopaminergic neurons, serotonergic neurons and pars reticulata cells after chronic treatments with different drugs of abuse and subsequent withdrawal. In particular, his research has identified a tonic reduction in the spontaneous electrophysiological activity of mesolimbic dopaminergic neurons projecting to the nucleus accumbens after withdrawal from chronic treatments with ethanol, opioids and cannabinoids. It was further shown, that these changes (hypofunction) in DA neuronal functioning overlap and outlast behavioral somatic signs of withdrawal suggesting a role, for this system, in the long lasting consequences of chronic drug intake and withdrawal. Much of this work is summarized in recent reviews (2001-2005-2006). More recently, in continuing his research projects on the neurobiological effects of alcohol, it has been observed that acetaldehyde, derived from ethanol metabolism, stimulates the activity of DAergic neurons, thereby suggesting a possible role in alcohol reward, dependence and alcoholism. Further, studies show effects of opiates and cannabinoids, specifically on the biophysical and morphological changes in the VTA and various dopaminoceptive areas (nucleus accumbens, prefrontal cortex), after chronic administration and withdrawal. Additional recent studies involve clinical evaluation of cognitive functions in human addicts and the role of pharmacological therapies including ongoing studies on the effect of Transcranial Magnetic Stimulation on cocaine and alcohol addicts.

He is author of more than 100 publications in international journals. Appointed by the European Commission to act as reviewer in the 6th Framework Programme (2006). Member of the experts on psychostimulant therapies appointed by the United Nations (UNODC-2017)

EDITORIAL ACTIVITY.

Ad hoc referee for:

Acta Physiol. Scand., Alcohol, Alcohol. Clin & Exptl Res., Arch. Gen. Psych., Brain, Brain Res., Brain Res. Bull., Eur. J. Neurosci., Eur. Neuropsychopharm., Eur. J. Neurosci, Int. J. Neuropsychopharm., JAMA, J. Neurophysiol., J. Neurosci., J. Physiol., J. Pharmacol. Exptl. Ther., Mol. Pharmacol, NeuroReport, Neurosci. Letters, Neurosci. Biobehav. Rev., Neuropharmacology, Neuropsychopharmacology, Pharmacol. Bioch & Behav, P.N.A.S., Progr. in Neurobiol., Progr. in Neuropsychopharm & Biol. Psych., Psychopharmacology, Synapse.

Editorial Boards:

Journal of drug and alcohol research (2012)

Open Journal of Neuroscience (2011)

Associate Editor for Frontiers in Addictive Disorders (2010).

Cannabis e danni alla salute (2011) A cura di: G. Serpelloni, M. Diana, M. Gomma, C. Rimondo.

PATENTS. Simultaneous Golgi-Cox and immunofluorescence using confocal microscopy (2011).

Filter for vehicles fueled by GPL (2016).

Funding, Awards and Academic duties.

2012-2015: President of the Committee for research evaluation (Dept. Of Chemistry and Pharmacy).

2011 Start Cup: Local (Sassari) first three classified (1500€); (Sardinian Phase) 1st classified (5000€)

2010 Principal Investigator of the project: "Effetti stimolanti dell'etanolo e dell'acetaldeide sul sistema dopaminergico mesolimbico: ruolo del sistema oppioidergico. Prot. CRP1_153 (RAS)

2010 National Coordinator of the project: "Studio e ricerca sulla stimolazione transcranica magnetica nel supporto alla cura della tossicodipendenze e della prevenzione delle recidive.'Dip. Politiche Antidroga, Presidenza del Consiglio dei Ministri'.

2006 Award for scientific productivity, University of Sassari (5000€).

2006 National Coordinator of the project: "Role of acetaldehyde in the central effects of alcohol: involvement in alcoholism and new therapeutic perspectives" PRIN 2006 prot. 2006057754.

2005 Principal investigator of the project: "Effect of stress on the central actions of addicting substances" (RAS)

2004 National Coordinator of the project: "The post-synaptic site of dopaminergic transmission in opiate dependence: role of dopaminoceptive Medium Spiny Neurons" PRIN 2004 prot. 2004052392.

2004 Principal investigator of the project: "Effects of stress on Dopaminergic neurons"(RAS)

1999 Local Principal Investigator of the project: "Cognitive effects of cannabinoids: electrophysiology, biochemistry and behavior" PRIN 1999 prot. 9905043527_004

1999 Principal investigator of the project (Univ. Sassari): "Production of divulgative material on Nicotine e Alcohol. (RAS)

INVITED LECTURES, MEETINGS and INTERVIEWS.

M. Diana (2018) Un trattamento basato sulla plasticità cerebrale: la Stimolazione Magnetica Transcranica. La dipendenza da Cocaina: quali trattamenti possibili? 19 Ottobre, Lecce.

M. Diana (2018) La Stimolazione Magnetica Transcranica nella terapia delle tossicodipendenze: rationale e prospettive. CRAVING E DISTURBI DA ADDICTION- Convergenze delle nuove tecnologie per la prevenzione e la cura."THE HUB HOTEL" - Milano Fiere 4-5 Ottobre.

M. Diana (2018) La Stimolazione Magnetica Transcranica nella terapia delle tossicodipendenze. Addiction e comportamenti a rischio: scenari in cambiamento. Convegno di apertura al Master di I° livello. Mestre 3 Ottobre 2018.

M. Diana (2018) The Synaptic Triad of the Nucleus Accumbens in Alcohol Dependence. 50th Brazilian Congress of Pharmacology and experimental Therapeutics 'System plasticity in Therapeutics'. Ribeirao Preto, Brazil, September 25-28. (Invited speaker).

M. Diana (2018) Exploiting the hypodopaminergic state with transcranial magnetic stimulation in addiction. Barcelona Cognition, Brain and Technology summer school 2018. Barcelona (Spain) September 4-6. (Invited lecturer).

M. Diana (2018) Neurobiologia delle addiction e possibili implicazioni terapeutiche della stimolazione magnetica transcranica. XXII Congresso della Società Italiana di Psicopatologia. Roma 21-24 Febbraio. (Invited speaker).

M. Diana (2017) The Synaptic Triad of the Nucleus Accumbens in Alcohol Dependence. 2nd Zardi-Gori Foundation Scientific Conference-Alcohol Use Disorder: from Bench to Bedside. Milan November 20-21. (Invited speaker).

M. Diana (2017) Transcranial Magnetic stimulation reduces cocaine intake. Group of experts on psychostimulant addiction (United Nations, office of drug and crime) Vienna (Austria) October 17-19. (Invited speaker).

M. Diana (2017) The synaptic triad of the nucleus accumbens in alcohol dependence. XVII Congress of the Italian Society for Neuroscience. Ischia (Italy) October 1-4. (Invited speaker).

M. Diana (2017) Dopaminergic hypofunction in drug addiction: from rodents to humans: Potential role of transcranial magnetic stimulation. I 100 anni della tossicologia fiorentina 1917-2017, September 29-30, Firenze Italy (Invited speaker).

M. Diana (2017) Probing the hypodopaminergic state with TMS in addicts: preliminary observations. 6th International IDARS meeting. Dubrovnik (Croatia), September 4-8, (invited speaker & chair).

M. Diana (2017) Exploiting the hypodopaminergic state with TMS in addicts: preliminary observations. Mediterranean Neuroscience Society-6th Meeting, June 12th - 15th, Saint Julians Malta. (symposium organizer & chair).

M. Diana. (2017) Dopaminergic hypofunction in alcohol dependence: from rodents to humans. Alcoholism and Stress: A Framework for Future Treatment Strategies. May 9th -12th, 2017 Volterra, Italy (invited speaker).

M. Diana (2016) National Institute on Drug Abuse. Narrative of Discovery: Can Magnets Treat Cocaine Addiction? Retrieved from: <https://www.drugabuse.gov/news-events/nida-notes/2016/07/narrative-discovery-can-magnets-treat-cocaine-addiction-part-2>

M. Diana (2016) Deep Transcranial Magnetic Stimulation of the Dorsolateral Prefrontal Cortex in Alcohol Use Disorder Patients: Effects on Dopamine Transporter Availability and Alcohol Intake. International Conference on Transcranial Magnetic Stimulation For addiction. June 24, San Camillo Hospital, Venice, Italy (invited speaker).

M. Diana (2016) Dopaminergic hypofunction in alcohol dependence: from rodents to humans. IBNS 25th Annual Meeting, June 7-12, Budapest, Hungary (Invited speaker).

M. Diana (2016) La neurobiologia del poliabuso. Alcol e sostanze d'abuso: basi neurobiologiche e prospettive terapeutiche. Castello Comunale February 26, Mesagne (BR) Italy (Invited lecturer).

M. Diana (2015) National Institute on Drug Abuse. Narrative of Discovery: Can Magnets Treat Cocaine Addiction? Retrieved from <http://www.drugabuse.gov/news-events/nida-notes/2015/09/narrative-discovery-can-magnets-treat-cocaine-addiction>

M. Diana. (2015) Neuroadaptive mechanisms in ethanol withdrawal: from spines to spikes. XVI Congress of the Italian Society for Neuroscience. Cagliari (Italy) October 8th-11th. (Invited speaker).

M. Diana. (2015) Dopamine hastens LTD in the Nacc of ethanol-dependent rats. 15th ESBRA meeting. Valencia (Spain), September 12th-15th (invited speaker).

M. Diana (2015) The synaptic triad of the nucleus accumbens in alcohol dependence. Mount Sinai Hospital, NY June 26th, 2015 (invited lecturer).

M. Diana (2015) Structural and functional neuroadaptations in ventral striatum due to withdrawal from chronic ethanol exposure. 38th Annual Scientific Meeting of the Research Society on Alcoholism, San Antonio (TX), June 20th -24th (invited speaker).

M. Diana (2015) New animal models of drug addiction: behavioral and neurobiological perspectives. Mediterranean Neuroscience Society-5th Meeting, June 12th - 15th, Santa Margherita di Pula, Italy. (invited speaker).

M. Diana (2014) The dopamine hypothesis of drug addiction: from rodents to humans. Jiao Tong University, Shanghai China. November 26, 2014. (invited lecturer).

M. Diana. (2014) Profound and selective decrease of dendritic spines in the nucleus accumbens of ethanol dependent rats. Alcoholism and Stress: A Framework for Future Treatment Strategies. May 6th -9th, 2014 Volterra, Italy (invited speaker).

M. Diana (2013) Imaging and the role of dopamine across addictions: differences and commonalities. 'Dopamine 2013' meeting Alghero 24-28, Italy (Invited chair).

M. Diana (2013) DA role in the addicted brain: from synapses to human brain imaging. 'Dopamine 2013' meeting Alghero 24-28, Italy (Invited chair).

M. Diana. (2013) 'Dopamine 2013' meeting Alghero 24-28, Italy. Organizer and coordinator of the local Organizing Committee

M. Diana. (2012) Alcohol and tobacco: is acetaldehyde the reinforcing bridge? XIV Congress of the Italian Society for Neuroscience. Catania (Italy) April 19th-22nd, 2012. (Invited chair)

M. Diana. (2011) Dopamine's role in addiction. Univ of Puerto Rico, San Juan (PR) November 8th (invited lecturer).

M. Diana. (2011) The dopamine hypothesis of drug addiction and its potential therapeutic value. 3rd International IDARS meeting. Istanbul (Turkey), August 23rd 26th 2011 (invited speaker & chair).

M. Diana. (2011) The dopamine hypothesis of drug addiction. 8th IBRO World Congress of Neuroscience. Florence (Italy) July 14th-18th 2011 (invited speaker & chair).

M. Diana. (2010) Cannabis withdrawal: morphology and function of the dopamine system. The Scripps Research Institute, La Jolla (CA), November 18th (invited lecturer).

M. Diana (2010) Hypodopaminergic state in addiction: new therapeutic strategies. 1st Italian Workshop of advanced studies in Addiction Medicine Rome 28-29 October (invited speaker).

M. Diana (2010) Ethanol, Acetaldehyde and dopamine neurons. 2010 ISBRA World Congress. Paris, September 13-16 (invited speaker).

M. Diana (2010) Neuroscience of Addiction Verona June 7-9 2010. (symposium organizer & chair).

M. Diana. (2010) Altered architecture of the mesolimbic dopamine system and its functional consequences in cannabis dependence. Columbia Univ. New York (NY), April 15th (invited lecturer).

M. Diana. (2010) Altered architecture of the mesolimbic dopamine system and its functional consequences in cannabis dependence. NIDA Bethesda (MD), April 14th (invited lecturer).

M. Diana (2009) Ipotesi dopaminergica della tossicodipendenza e basi di terapia sperimentale. Evento Nazionale S.I.T.D. 2009 "Addiction: tra Biologia e Società prospettive per un dialogo interdisciplinare" Roma, 12-13 novembre (invited speaker)

M. Diana. (2009) Altered architecture of the mesolimbic dopamine system and its functional consequences in cannabis dependence. 2nd International IDARS meeting. Seoul (Korea), August 17th 21st (invited speaker & chair).

M. Diana. (2009) Long-term outcome of buprenorphine treatment of opiate-dependent subjects. 2nd International IDARS meeting. Seoul (Korea), August 17th -21st. (invited speaker & chair).

M. Diana. (2008) Role of dopamine in addiction. November 24th . Weizmann Institute, Rehovot Israel. (invited lecturer)

M. Diana. (2008) Role of dopaminergic systems in addictive states. International symposium on drugs of abuse. July 28th - 29th, Island of São Miguel, Azores, Portugal (invited speaker & chair).

M. Diana (2008) Role of ethanol-derived acetaldehyde on dopamine transmission. 31th Annual Scientific Meeting of the Research Society on Alcoholism, Washington D.C. June 28 –July 2 (invited speaker).

M. Diana. (2008) D-Penicillamine prevents ethanol and acetaldehyde-induced increase in mesolimbic dopamine transmission. Alcoholism and Stress: A Framework for Future Treatment Strategies. May 6th -8 th, 2008 Volterra, Italy. (invited speaker).

M. Diana. (2008) Morphological alterations in response to drug taking in core nuclei of the addiction pathway – is this the hard-wiring of drug-induced memory? 10th International Neuroscience winter

Conference, April 5th -10th 2008, Sölden (Austria). April 05-10 2008, Sölden, Austria, (invited speaker).

M. Diana. (2007) The dopaminergic pathway. 9th Annual Conference of SRNT Europe, 3rd-6th October 2007 Madrid (Spain). (invited speaker).

M. Diana. (2007) Acetaldehyde: the hidden addictive compound. Meeting of the Italian Society for Neuroscience. Verona (Italy), September 27th -30th. (symposium organizer & chair).

M. Diana. (2007) Acetaldehyde mediates alcohol activation of the mesolimbic dopamine system. 11th ESBRA meeting. Berlin (Germany), September 23rd -26th (invited speaker).

M. Diana. (2007) Acetaldehyde mediates alcohol activation of the mesolimbic dopamine system. 1st International IDARS meeting. Merida (Mexico), August 14th -18th (invited speaker).

M. Diana. (2007) Effects of buprenorphine in cognitive performances of opiate dependent subjects. 1st International IDARS meeting. Merida (Mexico), August 14th -18th (invited speaker & chair).

M. Diana. (2006) The dopamine hypothesis of drug addiction: hypodopaminergic state. Rosalind Franklin University, Chicago, IL May 3rd 2006 (invited lecturer).

M. Diana. (2005) Morphine withdrawal-induced morphological changes in the nucleus accumbens. Satellite meeting of the international society for neurochemistry and european society for neurochemistry. Venice (Italy), August 16th -19th (invited speaker and chair).

M. Diana. (2004) Acetaldehyde increases dopaminergic neuronal activity: a possible mechanism for acetaldehyde reinforcing effects. 12th Congress of the International Society for Biomedical Research on Alcoholism, Heidelberg (Germany), September 29th –October 2nd . (invited speaker).

M. Diana. (2004) Effects of chronic ethanol and withdrawal on dopaminergic ventral tegmental area neurons. 12th Congress of the International Society for Biomedical Research on Alcoholism, Heidelberg (Germany), September 29th –October 2nd . (invited speaker).

M. Diana. (2004) Acetaldehyde increases dopaminergic transmission in the VTA. 27th Annual Scientific Meeting of the Research Society on Alcoholism. Vancouver, BC, Canada June 27-July 2nd . (invited speaker).

M. Diana. (2004) “Dopaminergic mechanisms of drug dependence” McGill University, Montreal Canada, June 28th (invited lecturer).

M. Diana. (2004) How your mind can influence your body: An overview. 23rd EAACI Congress, June 12-16 2004, Amsterdam, the Netherlands. (invited plenary lecturer).

M. Diana. (2003) Reduction in dopamine impulse flow after opiates and cannabinoids: electrophysiology and morphology. ACNP 42nd Annual Meeting San Juan Puerto Rico December 7-11, 2003 (invited speaker).

M. Diana. (2003) Opening remarks. The neural basis of craving and withdrawal in drug addiction. ACNP 42nd Annual Meeting San Juan Puerto Rico December 7-11, 2003 (symposium organizer & chair).

M. Diana. (2003) Neuronal plasticity deficits affecting dopamine neurons after chronic drugs of abuse and withdrawal. 6th IBRO World Congress of Neuroscience, Prague, Czech Republic, 10 – 15 July 2003 (symposium organizer & chair).

M. Diana (2002) Electrophysiological and morphological effects of chronic ethanol and withdrawal on the mesolimbic system. 25th Annual Scientific Meeting of the Research Society on Alcoholism joint with the 11th Congress of the International Society for Biomedical Research on Alcoholism, San Francisco, California (USA), June 28 –July 3 July 2002 (invited symposium organizer & chair).

M. Diana (2002) Drug withdrawal-induced dopamine impairment: anhedonia or hypoedhonia? XXIIIrd CINP Congress, Montreal Canada June 23-27, 2002. (Invited speaker).

M. Diana, A.L. Muntoni, M. Melis, M. Pistis and G.L. Gessa (2001) Electrophysiological effects of cannabinoids in the basal ganglia. International Basal Ganglia Society (IBAGS). 7th triennial meeting Bay of Islands New Zealand. February 11-14, 2001. (Invited speaker).

M. Diana (2001) Effect of chronic ethanol and withdrawal on dopaminergic ventral tegmental area neurons: in vivo electrophysiological studies. Research Society on Alcoholism. 24th Annual scientific meeting. Montreal, Canada. June 23-28. (Invited speaker).

M. Diana A.L. Muntoni, M. Pistis, G.L. Gessa (2000) Cannabinoid interactions with dopaminergic systems. XXIIInd CINP Congress, Brussels July 9-13. Int. J. Neuropsychopharmacol. Vol 3 suppl 1, S41.

M. Diana (1998) Dopaminergic mechanisms of opioid withdrawal. Symposium: Cellular mechanisms of opioid withdrawal. 28th Annual Meeting Society for Neuroscience, Los Angeles, CA, USA November 7-12, 1998 (Invited speaker).

M. Diana, M. Melis, A.L. Muntoni & G.L. Gessa. (1998) Electrophysiological effects of cannabinoids on central dopaminergic systems. Dopamine '98 Meeting Strasbourg France July 22-25, 1998 (Invited speaker).

M. Diana, A.L. Muntoni, M. Pistis, M. Melis and G.L. Gessa. (1996) Drugs of abuse and dopamine cell activity. 8th Internat. Catecholamine Symp., Pacific Grove CA, October 13-18, (Invited speaker).

M. Diana (1996) Long-lasting changes in mesolimbic dopaminergic activity after drug withdrawal. 6th International Meeting of the European Behavioural Pharmacology Society. Behav. Pharmacol. 7 suppl 1. (Invited speaker).

M. Diana, A.L. Muntoni, M. Pistis and G.L. Gessa. (1995) Dopaminergic mechanisms of drug withdrawal. International Basal Ganglia Society (IBAGS). 5th triennial meeting, Nemuno Sato, Japan, May 23rd-26th (Invited speaker).

M. Diana, M. Pistis, A.L. Muntoni and G.L. Gessa. (1994) Alterazioni nella funzione dopaminergica mesolimbica durante le sindromi d'astinenza da sostanze d'abuso. 7° Congresso della Società Italiana di Psichiatria Biologica, Forte Hotel Village, Sardinia, Italy, 4-7 Ottobre (Invited speaker).

M. Diana. Studi sul meccanismo d'azione del GHB. (1994) Il Gammidrossibutirrato (GHB): dalla biologia alla clinica. Firenze 3 Ottobre (Invited speaker).

M. Diana, A.L. Muntoni, M. Pistis, & G.L. Gessa. (1994) Dopaminergic mechanisms of drug withdrawal syndromes. XXVII congress of the Italian Pharmacological Society, Torino Italy, 26-29 Settembre 1994 (Invited speaker).

M. Diana, M. Pistis, A.L. Muntoni and G.L. Gessa. (1994) Dopaminergic activity during ethanol withdrawal syndrome. 4th joint meeting of Hungarian, Italian and Polish Pharmacological Societies. 19-21 September, Poznan, Poland. (Invited speaker).

M. Diana, A.L. Muntoni, M. Pistis and G.L. Gessa. (1994) Dopaminergic mechanisms in ethanol withdrawal. XIXth CINP Congress, Washington D.C. USA, June 27-July 1, 1994 (Invited speaker).

M. Diana, M. Pistis, A. Muntoni and G.L. Gessa. (1992) Electrophysiological effects of acute and chronic ethanol administration. XXVI congress of the Italian Pharmacological Society, September 29-October 3 Napoli, Italy (Invited speaker).

M. Diana. (1992) Electrophysiological evidence for D1-like dopamine autoreceptors in the nigro-striatal system. Dopamine 92 Meeting, Forte Hotel Village, Sardinia, Italy, May 16-20, (Invited speaker).

M. Diana. (1990) Effects of cocaine on the electrical activity of dopaminergic neurons. XXV congress of the Italian Pharmacological Society, October 14-18, Taormina Italy (Invited speaker).

M. Diana, C. Okuda and P.M. Groves. (1989) Electrophysiological analysis of the action of a new

dopamine D1 receptor agonist SKF 77434. Capo Boi Conference on Neuroscience, 6th Annual Meeting, Cagliari, Italy, June 4-9 (Invited speaker).

M. Diana, M. Garcia-Munoz, C.R. Freed. (1986) Chronic single unit recording from dopamine cells in the substantia nigra zona compacta of circling rats. 16th Annual Meeting of the Society for Neurosciences, Washington D.C., U.S.A., November 13-18.

TEACHING.

School of Pharmacy

Toxicology (64 hrs/year) Academic years (2014-2018).

Toxicology (48hrs/year). Academic years (2011-2013).

Toxicology (80hrs/year). Academic years (2009-2010).

Toxicology (40hrs/year). Academic years (1998-2008).

Pharmacology (80hrs/year). Academic years (2007-2009).

Pharmacology (40hrs/year). Academic years (2000-2006).

Ph.D. Course in Pharmacology of Drug Addiction

Neurophysiology 6-8 hrs/year. Academic years (2003-2009).

TUTORSHIPS.

A.L. Muntoni M.D.

M. Pistis M.D.

M. Melis Ph.D.

A. Lintas Ph.D.

D. Sirca Ph.D.

G. Muggironi Ph.D.

G. R. Fois Ph.D.

F. Caboni Ph.D.

SCIENTIFIC PUBLICATIONS.

1) M. Diana, M. Garcia-Munoz, C.R. Freed. (1987) Wire electrodes for chronic single unit recording of dopamine cells in Substantia nigra pars compacta of awake rats. *J. of Neurosci. Meth.*, 21: 71-79.

2) P. Carcangiu, M. Diana, F. Franch, F. Marrosu, V. Boi, G.P. Mereu. (1988) Electrophysiological evidence for blockade of dopamine receptors by thioridazine. In: *Central and Peripheral dopamine receptors* (Biggio G., Spano P.F., Tofano G. and Gessa G.L. Eds.) *Symposia in Neurosciences*, vol. 5, Springer-Verlag, Berlin. pp. 129-138.

3) P.M. Groves, L.J. Ryan, M. Diana and R.F. Gariano. (1988) Neurophysiological consequences of amphetamine administration. In: *National Institute on Drug Abuse Research Monograph 90*. pp. 213-222.

4) M. Diana, S.J. Young & P.M. Groves. (1989) Modulation of dopaminergic terminal excitability by D1 selective agents. *Neuropharmacology* 28: 99-101.

- 5) M. Diana, M. Garcia-Munoz, J.B. Richards, C.R. Freed. (1989) Electrophysiological analysis of dopamine cells from the Substantia Nigra Pars Compacta of circling rats. *Exptl. Brain Res.* 74: 625-630.
- 6) P.M. Groves, L.J. Ryan, M. Diana, S.J. Young and L.J. Fischer. (1989). Neuronal actions of amphetamine in the rat brain. In: National Institute on Drug Abuse Research Monograph 94. pp. 127-145.
- 7) P.M. Groves, C. Okuda and M. Diana (1989). Dopamine, depression and presynaptic receptors. In: Dopamine and mental depression (G.L. Gessa & G. Serra eds.) *Advances in Biosci.* vol.77 pp. 109-120.
- 8) M. Diana, L.J. Ryan, S.J. Young and P.M. Groves. (1989). Dopamine D1 receptors and terminal excitability in the striatonigral and nigrostriatal systems. In: Basal Ganglia III (G. Bernardi, M.B. Carpenter, G. Di Chiara, M. Morelli and P. Stanzione eds.) Plenum Press pp. 241-250.
- 9) L.J. Ryan, M. Diana, S.J. Young and P.M. Groves (1989) Dopamine D1 heteroreceptors on striatonigral axon terminals are not stimulated by endogenous dopamine either tonically or after amphetamine: evidence from terminal excitability. *Exptl. Brain Res.* 77: 161-165.
- 10) L. Pani, A. Kuzmin, M. Diana, G. De Montis, G.L. Gessa and Z.L. Rossetti. (1990) Calcium receptor antagonists modify cocaine effects in the central nervous system differently. *Eur. J. Pharmacol.* 190: 217-221.
- 11) M. Diana, S.J. Young and P.M. Groves (1991). Modulation of dopaminergic terminal excitability by D1 selective agents: Further characterization. *Neuroscience* 42(2): 441-449.
- 12) M. Diana, L. Pani, Z. Rossetti and G.L. Gessa (1991) Flunarizine attenuates cocaine-induced inhibition of A9 dopaminergic neurons. *Pharmacol. Res.* 24(2): 197-203.
- 13) M. Diana, M. Collu, A. Mura and G.L. Gessa. (1991). Chronic haloperidol-induced vacuous chewing in the rat is mediated by endogenous dopamine stimulating D1 receptors. *Posters in Neuroscience* 1(1): 71-73.
- 14) L. Pani, A. Kuzmin, M. Diana, G. De Montis, G.L. Gessa and Z.L. Rossetti. (1991). Dihydropyridine calcium antagonists prevent cocaine-induced dopamine release and motor activity in rats. *Posters in Neuroscience* 1(1): 85-88.
- 15) M. Diana, G. Mereu, A. Mura, F. Fadda, N. Passino and G.L. Gessa. (1991) Low doses of gamma-hydroxybutyric acid stimulate the firing rate of dopaminergic neurons in unanesthetized rats. *Brain Res.* 566: 208-211.
- 16) M. Diana, M. Collu, A. Mura and G.L. Gessa. (1992). Haloperidol-induced vacuous chewing in rats: suppression by alpha-methyl-tyrosine. *Eur. J. Pharmacol* 211: 415-419.

- 17) Z.L. Rossetti, F. Melis, S. Carboni, M. Diana and G.L. Gessa. (1992) Alcohol withdrawal in rats is associated with a marked fall in extraneuronal dopamine. *Alcoholism: clin. and exptl. res.* 16(3): 529-532.
- 18) G. Biggio, M. Cibir, M. Diana, F. Fadda, S.D. Ferrara, L. Gallimberti, G.L. Gessa, G.P. Mereu, Z.L. Rossetti, M. Serra. (1992) Suppression of voluntary alcohol intake in rats and alcoholics by gamma-hydroxybutyric acid: a non gabaergic mechanism. 7th Sardinian conference on neuroscience. In: *GABAergic synaptic transmission (Advances in Biochem. Psychopharm. vol 47 G. Biggio, A. Concas E. Costa eds. p. 281-288 (Raven Press).*
- 19) M. Diana, Z.L. Rossetti and G.L. Gessa. (1992) Lack of tolerance to ethanol-induced stimulation of mesolimbic dopamine system. *Alcohol & Alcoholism* 27 (4): 329-334.
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