

# **MARIA SCHERMA**

## ***Curriculum vitae et studiorum***

### **CURRENT POSITION:**

Associate Professor of Pharmacology (BIO-11)

#### **Work address:**

Department of Biomedical Science, Division of Neuroscience and Clinical Pharmacology

University of Cagliari

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### **EDUCATION:**

- 2007** Specialization Course in Pharmacology  
School of Medicine  
University of Cagliari (Italy).
- 2004** PhD in Neuroscience,  
University of Cagliari (Italy).
- 1997** Degree in Pharmaceutical Chemistry and Technology,  
University of Cagliari (Italy).

### **WORK EXPERIENCE:**

**2022-present:** Associate Professor of Pharmacology (BIO-11), Department of Biomedical Sciences, Division of Neuroscience and Clinical Pharmacology, University of Cagliari, Italy.

**2019-2022:** Assistant Professor (RTD/B), Department of Biomedical Sciences, Division of Neuroscience and Clinical Pharmacology, University of Cagliari, Italy.

**2018-2019:** Assistant Professor (RTD/A), Department of Biomedical Sciences, Division of Neuroscience and Clinical Pharmacology, University of Cagliari, Italy.

**2012-2018** Research fellow, Department of Biomedical Science, Section of Neuroscience and Clinical pharmacology, University of Cagliari (Italy).

**2010-2012** Research assistant, “B.B. Brodie” Department of Neuroscience, University of Cagliari (Italy).

**October 2010- September 2011:** Extramural collaborator, NIH, NIDA, Behavioral Neuroscience Branch, Preclinical Pharmacology Section, Baltimore, Maryland, USA;

**2008-2010** Postdoctoral Fellow, “B.B. Brodie” Department of Neuroscience, University of Cagliari (Italy).

**2005-2007** Visiting Postdoctoral Fellow, National Institute on Drug Abuse, National Institute of Health, Behavioral Neuroscience Branch, Preclinical Pharmacology Section, Baltimore (Maryland, USA).

**2001-2003** Ph.D. student in Neuroscience, “B.B. Brodie” Department of Neuroscience, University of Cagliari (Italy).

### **FIELDS OF EXPERTISE:**

Neuropsychopharmacology

Behavioral Pharmacology

Neurobiology of natural and drug reward

Drug and food addiction

**MAIN FUNDING:**

**2024-2025**

Research project supported by Unione europea –NextGenerationEU – PNRR. Project title: PROFILES “Peripheral and centRal Immune prOfiles revealing the Impact of sex on biomarkers in muLtipLe sclErosis and parkinSon's disease.

Role Team Member

**2023-2025**

Research project supported by PRIN (PROGETTI DI RICERCA DI RILEVANTE INTERESSE NAZIONALE) – Bando 2022 Prot. 2022JRTZXP Project title: “Tackling inflammatory clues in neurodegeneration: the renin angiotensin system as a target for intervention in Alzheimer's disease”

Role Team Member

**2022-2024**

Research project supported by Progetti biennali FdS - Bando 2021, Project title: “Role of the orexin neuropeptide system in the pathophysiology of anorexia nervosa: a preclinical study in the Activity-Based Anorexia (ABA) animal model.”

Role Principal Investigator

**2021-2023**

Research project supported by Progetti biennali FdS - Bando 2019, Project title: “Investigating neurobiological markers of obsessive-compulsive disorder: a cross-sectional study in different phenotypic subgroups.”

Role: co-Investigator.

**CITATIONS:**

Scopus: 2288; h- index 26

**PEER REVIEWED PUBLICATIONS**

1. Balla J, Siddi C, Scherma M, Fadda P, Dedoni S. Antibody conjugates in neuroblastoma: a step forward in precision medicine. *Front Oncol.* 2025 Mar 10;15:1548524. doi: 10.3389/fonc.2025.1548524.
2. Mercuriali G, Lodde L, Paribello P, Sapienza J, Corona A, Ave C, Pacini D, Nocera D, Corrias C, El Kacemi S, D'Incalci M, Frau I, Monzani E, Valtorta F, Congiu D, Meloni A, Scherma M, Fadda P, Dedoni S, Siddi C, Sut S, Dall'Acqua S, Nasini S, Barzon B, Squassina A, Cavallaro R, Manchia M, Pisanu C, Bosia M, Comai S. The clock is ticking on schizophrenia: a study protocol for a translational study integrating phenotypic, genomic, microbiome and biomolecular data to overcome disability. *Front Psychiatry.* 2024 Oct 30;15:1451678. doi: 10.3389/fpsy.2024.1451678.
3. Spero V, Scherma M, D'Amelio S, Collu R, Dedoni S, Camoglio C, Siddi C, Fratta W, Molteni R, Fadda P. Activity-based anorexia (ABA) model: Effects on brain neuroinflammation, redox balance and neuroplasticity during the acute phase. *Neurochem Int.* 2024 Nov;180:105842. doi: 10.1016/j.neuint.2024.105842.
4. Paribello P, Manchia M, Isayeva U, Upali M, Orrù D, Pinna F, Collu R, Primavera D, Deriu L, Caboni E, Iaselli MN, Sundas D, Tusconi M, Scherma M, Pisanu C, Meloni A, Zai CC, Congiu D, Squassina A, Fratta W, Fadda P, Carpiniello B. A Secondary Analysis of the Complex Interplay between Psychopathology, Cognitive Functions, Brain Derived

- Neurotrophic Factor Levels, and Suicide in Psychotic Disorders: Data from a 2-Year Longitudinal Study. *Int J Mol Sci.* 2024 Jul 19;25(14):7922. doi: 10.3390/ijms25147922.
5. Isayeva U, Manchia M, Collu R, Primavera D, Deriu L, Caboni E, Iaselli NM, Sundas D, Tusconi M, Pinna F, Paribello P, Scherma M, Pisanu C, Meloni A, Zai CC, Congiu D, Squassina A, Fratta W, Fadda P, Carpiniello B. Symptomatic remission and recovery in major psychosis: Is there a role for BDNF? A secondary analysis of the LABSP cohort data. *Schizophr Res.* 2024 Apr;266:197-204. doi: 10.1016/j.schres.2024.02.019.
  6. Scherma M, Palmas MF, Pisanu A, Masia P, Dedoni S, Camoglio C, Fratta W, Carta AR, Fadda P. Induction of Activity-Regulated Cytoskeleton-Associated Protein and c-Fos Expression in an Animal Model of Anorexia Nervosa. *Nutrients.* 2023 Sep 1;15(17):3830. doi: 10.3390/nu15173830.
  7. Paribello, P.; Carpiniello, B.; Murgia, R.; Porcheddu, A.A.; El-Kacemi, S.; Pinna, M.; Contu, M.; Costa, G.; Barbarossa, R.; Sanna, E.; et al. Identifying Neurobiological Markers in Obsessive–Compulsive Disorder: A Study Protocol for a Cross-Sectional Study in Subgroups of Differing Phenotype. *Appl. Sci.* 2023, 13, 7306. <https://doi.org/10.3390/app13127306>
  8. Dedoni S, Scherma M, Camoglio C, Siddi C, Dazzi L, Puliga R, Frau J, Cocco E, Fadda P. An overall view of the most common experimental models for multiple sclerosis. *Neurobiol Dis.* 2023 Aug;184:106230. doi: 10.1016/j.nbd.2023.106230.
  9. Dedoni S, Scherma M, Camoglio C, Siddi C, Fratta W, Fadda P. Anaplastic Lymphoma Kinase Receptor: Possible Involvement in Anorexia Nervosa. *Nutrients.* 2023 May 6;15(9):2205. doi: 10.3390/nu15092205.
  10. Giunti E, Collu R, Dedoni S, Castelli MP, Fratta W, Scherma M, Fadda P. Food restriction and hyperactivity induce changes in corticolimbic brain dopamine and serotonin levels in female rats. *Behav Brain Res.* 2023 Apr 27;444:114374. doi: 10.1016/j.bbr.2023.114374
  11. Santoni M, Sagheddu C, Serra V, Mostallino R, Castelli MP, Pisano F, Scherma M, Fadda P, Muntoni AL, Zamberletti E, Rubino T, Melis M, Pistis M. Maternal immune activation impairs endocannabinoid signaling in the mesolimbic system of adolescent male offspring. *Brain Behav Immun.* 2023 Mar;109:271-284. doi: 10.1016/j.bbi.2023.02.002.
  12. Qvist JS, Scherma M, Jayaram-Lindström N, Fratta W, Kandel DB, Kandel ER, Fadda P, Melas PA. Synaptoproteomic Analysis of the Prefrontal Cortex Reveals Spatio-Temporal Changes in SYNGAP1 Following Cannabinoid Exposure in Rat Adolescence. *Int J Mol Sci.* 2022 Dec 31;24(1):698. doi: 10.3390/ijms24010698.
  13. Isayeva U, Manchia M, Collu R, Primavera D, Deriu L, Caboni E, Iaselli N, Sundas D, Tusconi M, Pinna F, Paribello P, Scherma M, Pisanu C, Meloni A, Zai CC, Congiu D, Squassina A, Fratta W, Fadda P, Carpiniello B. Exploring the association between brain-derived neurotrophic factor (BDNF) levels and longitudinal psychopathological and cognitive changes in Sardinian psychotic patients. *Eur Psychiatry.* 2022 Oct 25:1-19.
  14. Palmas MF, Etzi M, Pisanu A, Camoglio C, Sagheddu C, Santoni M, Manchinu MF, Pala M, Fusco G, De Simone A, Picci L, Mulas G, Spiga S, Scherma M, Fadda P, Pistis M, Simola N, Carboni E, Carta AR. The Intranigral Infusion of Human-Alpha Synuclein Oligomers Induces a Cognitive Impairment in Rats Associated with Changes in Neuronal Firing and Neuroinflammation in the Anterior Cingulate Cortex. *Cells.* 2022 Aug 24;11(17):2628.
  15. Dedoni S, Avdoshina V, Camoglio C, Siddi C, Fratta W, Scherma M, Fadda P. K18- and CAG-hACE2 Transgenic Mouse Models and SARS-CoV-2: Implications for Neurodegeneration Research. *Molecules.* 2022 Jun 28;27(13):4142.
  16. Pintori N, Castelli MP, Miliano C, Simola N, Fadda P, Fattore L, Scherma M, Ennas MG, Mostallino R, Flore G, De Felice M, Sagheddu C, Pistis M, Di Chiara G, De Luca MA. Repeated exposure to JWH-018 induces adaptive changes in the mesolimbic and

- mesocortical dopaminergic pathways, glial cells alterations, and behavioural correlates. *Br J Pharmacol*. 2021 Sep;178(17):3476-3497.
17. Melas PA, Scherma M, Fratta W, Cifani C, Fadda P. Cannabidiol as a Potential Treatment for Anxiety and Mood Disorders: Molecular Targets and Epigenetic Insights from Preclinical Research. *Int J Mol Sci*. 2021 Feb 13;22(4):1863
  18. Boi L, Pisanu A, Palmas MF, Fusco G, Carboni E, Casu MA, Satta V, Scherma M, Janda E, Mocchi I, Mulas G, Ena A, Spiga S, Fadda P, De Simone A, Carta AR. Modeling Parkinson's Disease Neuropathology and Symptoms by Intranigral Inoculation of Preformed Human  $\alpha$ -Synuclein Oligomers. *Int J Mol Sci*. 2020 Nov 12;21(22):8535.
  19. Scherma M, Muntoni AL, Riedel G, Fratta W, Fadda P. Cannabinoids and their therapeutic applications in mental disorders<sup>[P]</sup><sub>[SEP]</sub>. *Dialogues Clin Neurosci*. 2020 Sep;22(3):271-279. doi: 10.31887/DCNS.2020.22.3/pfadda.
  20. Scherma M, Qvist JS, Asok A, Huang SC, Masia P, Deidda M, Wei YB, Soni RK, Fratta W, Fadda P, Kandel ER, Kandel DB, Melas PA. Cannabinoid exposure in rat adolescence reprograms the initial behavioral, molecular, and epigenetic response to cocaine. *Proc Natl Acad Sci U S A*. 2020 May 5;117(18):9991-10002
  21. D'Addario C, Zaplatic E, Giunti E, Pucci M, Micioni Di Bonaventura MV, Scherma M, Dainese E, Maccarrone M, Nilsson IA, Cifani C, Fadda P. Epigenetic regulation of the cannabinoid receptor CB1 in an activity-based rat model of anorexia nervosa. *Int J Eat Disord*. 2020 May;53(5):432-446.
  22. Collu R, Post JM, Scherma M, Giunti E, Fratta W, Lutz B, Fadda P, Bindila L. Altered brain levels of arachidonic acid-derived inflammatory eicosanoids in a rodent model of anorexia nervosa. *Biochim Biophys Acta Mol Cell Biol Lipids*. 2020 Apr;1865(4):15857
  23. Lecca S, Luchicchi A, Scherma M, Fadda P, Muntoni AL, Pistis M.  $\Delta$ 9-Tetrahydrocannabinol During Adolescence Attenuates Disruption of Dopamine Function Induced in Rats by Maternal Immune Activation. *Front Behav Neurosci*. 2019 Sep 6;13:202.
  24. Scherma M, Giunti E, Fratta W, Fadda P. Gene knockout animal models of depression, anxiety and obsessive compulsive disorders. *Psychiatr Genet*. 2019 Oct;29(5):191-199.
  25. Collu R, Scherma M, Piscitelli F, Giunti E, Satta V, Castelli MP, Verde R, Fratta W, Bisogno T, Fadda P. Impaired brain endocannabinoid tone in the activity-based model of anorexia nervosa. *Int J Eat Disord*. 2019 Nov;52(11):1251-1262.
  26. Sgheddu C, Scherma M, Congiu M, Fadda P, Carta G, Banni S, Wood JT, Makriyannis A, Malamas MS, Pistis M. Inhibition of N-acyl ethanolamine acid amidase reduces nicotine-induced dopamine activation and reward. *Neuropharmacology*. 2019 Jan;144:327-336.
  27. Scherma M, Masia P, Deidda M, Fratta W, Tanda G, Fadda P. New Perspectives on the Use of Cannabis in the Treatment of Psychiatric Disorders. *Medicines (Basel)*. 2018 Oct 2;5(4). pii: E107.
  28. Kononoff J, Melas PA, Kallupi M, de Guglielmo G, Kimbrough A, Scherma M, Fadda P, Kandel DB, Kandel ER, George O. Adolescent cannabinoid exposure induces irritability-like behavior and cocaine cross-sensitization without affecting the escalation of cocaine self-administration in adulthood. *Sci Rep*. 2018 Sep 17;8(1):13893.
  29. Scherma M, Masia P, Satta V, Fratta W, Fadda P, Tanda G. Brain activity of anandamide: a rewarding bliss? *Acta Pharmacol Sin*. 2018 Jul 26. doi: 10.1038/s41401-018-0075-x.
  30. Melas PA, Qvist JS, Deidda M, Upreti C, Wei YB, Sanna F, Fratta W, Scherma M, Fadda P, Kandel DB, Kandel ER. Cannabinoid Modulation of Eukaryotic Initiation Factors (eIF2 $\alpha$  and eIF2B1) and Behavioral Cross-Sensitization to Cocaine in Adolescent Rats. *Cell Rep*. 2018 Mar 13;22(11):2909-2923.
  31. Satta V, Scherma M, Piscitelli F, Usai P, Castelli MP, Bisogno T, Fratta W, Fadda P. Limited Access to a High Fat Diet Alters Endocannabinoid Tone in Female Rats. *Front Neurosci*. 2018 Feb 2;12:40.

32. Frahm S, Melis V, Horsley D, Rickard JE, Riedel G, Fadda P, Scherma M, Harrington CR, Wischik CM, Theuring F, Schwab K. Alpha-Synuclein transgenic mice, h- $\alpha$ -SynL62, display  $\alpha$ -Syn aggregation and a dopaminergic phenotype reminiscent of Parkinson's disease. *Behav Brain Res*. 2018 Feb 26;339:153-168.
33. Scherma M, Satta V, Collu R, Boi MF, Usai P, Fratta W, Fadda P. Cannabinoid CB1/CB2 receptor agonists attenuate hyperactivity and body weight loss in a rat model of activity-based anorexia. *Br J Pharmacol*. 2017 May 31. doi: 10.1111/bph.13892.
34. Primavera D, Manchia M, Deriu L, Tusconi M, Collu R, Scherma M, Fadda P, Fratta W, Carpinello B. Longitudinal assessment of brain-derived neurotrophic factor in Sardinian psychotic patients (LABSP): a protocol for a prospective observational study. *BMJ Open*. 2017 May 25;7(5):e014938. doi: 10.1136/bmjopen-2016-014938.
35. Satta V, Scherma M, Giunti E, Collu R, Fattore L, Fratta W, Fadda P. Emotional profile of female rats showing binge eating behavior. *Physiol Behav*. 2016 May 11;163:136-143. doi: 10.1016/j.physbeh.2016.05.013.
36. Schindler CW, Scherma M, Redhi GH, Vadivel SK, Makriyannis A, Goldberg SR, Justinova Z. Self-administration of the anandamide transport inhibitor AM404 by squirrel monkeys. *Psychopharmacology (Berl)*. 2016 May;233(10):1867-77.
37. Scherma M, Muntoni AL, Melis M, Fattore L, Fadda P, Fratta W, Pistis M. Interactions between the endocannabinoid and nicotinic cholinergic systems: preclinical evidence and therapeutic perspectives. *Psychopharmacology (Berl)*. 2016 May;233(10):1765-77.
38. Scherma M, Dessì C, Muntoni AL, Lecca S, Satta V, Luchicchi A, Pistis M, Panlilio LV, Fattore L, Goldberg SR, Fratta W, Fadda P. Adolescent  $\Delta(9)$ -Tetrahydrocannabinol Exposure Alters WIN55,212-2 Self-Administration in Adult Rats. *Neuropsychopharmacology*. 2016 Apr;41(5):1416-26.
39. Serra V, Fattore L, Scherma M, Collu R, Spano MS, Fratta W, Fadda P. Behavioural and neurochemical assessment of salvinorin A abuse potential in the rat. *Psychopharmacology (Berl)*. 2015 Jan;232(1):91-100.
40. Amchova P, Kucerova J, Giugliano V, Babinska Z, Zanda MT, Scherma M, Dusek L, Fadda P, Micale V, Sulcova A, Fratta W, Fattore L. Enhanced self-administration of the CB1 receptor agonist WIN55,212-2 in olfactory bulbectomized rats: evaluation of possible serotonergic and dopaminergic underlying mechanisms. *Front Pharmacol*. 2014 Mar 20;5:44.
41. Castelli MP, Madeddu C, Casti A, Casu A, Casti P, Scherma M, Fattore L, Fadda P, Ennas MG.  $\Delta 9$ -tetrahydrocannabinol prevents methamphetamine-induced neurotoxicity. *PLoS One*. 2014 May 20;9(5) 20;9(5):e98079.
42. Justinova Z, Mascia P, Wu HQ, Secci ME, Redhi GH, Panlilio LV, Scherma M, Barnes C, Parashos A, Zara T, Fratta W, Solinas M, Pistis M, Bergman J, Kangas BD, Ferré S, Tanda G, Schwarcz R, Goldberg SR. Reducing cannabinoid abuse and preventing relapse by enhancing endogenous brain levels of kynurenic acid. *Nat Neurosci*. 2013 Nov;16(11):1652-61.
43. Scherma M, Fattore L, Castelli MP, Fratta W, Fadda P. The role of the endocannabinoid system in eating disorders: neurochemical and behavioural preclinical evidence. *Curr Pharm Des*. 2014;20(13):2089-99.
44. Gamaledin I, Guranda M, Scherma M, Fratta W, Makriyannis A, Vadivel SK, Goldberg SR, Le Foll B. AM404 attenuates reinstatement of nicotine seeking induced by nicotine-associated cues and nicotine priming but does not affect nicotine- and food-taking. *J Psychopharmacol*. 2013 Jun;27(6):564-71.
45. Scherma M, Fattore L, Satta V, Businco F, Pigliacampo B, Goldberg SR, Dessi C, Fratta W, Fadda P. Pharmacological modulation of the endocannabinoid signalling alters binge-type eating behaviour in female rats. *Br J Pharmacol*. 2013 Jun;169(4):820-33.

46. Scherma M, Justinová Z, Zanettini C, Panlilio LV, Mascia P, Fadda P, Fratta W, Makriyannis A, Vadivel SK, Gamaledin I, Le Foll B, Goldberg SR. The anandamide transport inhibitor AM404 reduces the rewarding effects of nicotine and nicotine-induced dopamine elevations in the nucleus accumbens shell in rats. *Br J Pharmacol*. 2012 Apr;165(8):2539-48.
47. Mascia P, Pistis M, Justinova Z, Panlilio LV, Luchicchi A, Lecca S, Scherma M, Fratta W, Fadda P, Barnes C, Redhi GH, Yasar S, Le Foll B, Tanda G, Piomelli D, Goldberg SR. Blockade of nicotine reward and reinstatement by activation of alpha-type peroxisome proliferator-activated receptors. *Biol Psychiatry*. 2011 Apr 1;69(7):633-41.
48. Mazzola C, Medalie J, Scherma M, Panlilio LV, Solinas M, Tanda G, Drago F, Cadet JL, Goldberg SR, Yasar S. Fatty acid amide hydrolase (FAAH) inhibition enhances memory acquisition through activation of PPAR-alpha nuclear receptors. *Learn Mem*. 2009 Apr 29;16(5):332-7.
49. Fattore L, Spano MS, Cossu G, Scherma M, Fratta W, Fadda P. Baclofen prevents drug-induced reinstatement of extinguished nicotine-seeking behaviour and nicotine place preference in rodents. *Eur Neuropsychopharmacol*. 2009 Jul;19(7):487-98.
50. Scherma M, Fadda P, Le Foll B, Forget B, Fratta W, Goldberg SR, Tanda G. The endocannabinoid system: a new molecular target for the treatment of tobacco addiction. *CNS Neurol Disord Drug Targets*. 2008 Nov;7(5):468-81. Review.
51. Scherma M, Panlilio LV, Fadda P, Fattore L, Gamaledin I, Le Foll B, Justinova Z, Mikics E, Haller J, Medalie J, Stroik J, Barnes C, Yasar S, Tanda G, Piomelli D, Fratta W, Goldberg SR. Inhibition of anandamide hydrolysis by URB597 reverses abuse-related behavioral and neurochemical effects of nicotine in rats. *J Pharmacol Exp Ther*. 2008 Nov;327(2):482-90.
52. López-Moreno JA, Scherma M, Rodríguez de Fonseca F, González-Cuevas G, Fratta W, Navarro M. Changed accumbal responsiveness to alcohol in rats pre-treated with nicotine or the cannabinoid receptor agonist WIN 55,212-2. *Neurosci Lett*. 2008 Mar 5;433(1):1-5.
53. Scherma M, Medalie J, Fratta W, Vadivel SK, Makriyannis A, Piomelli D, Mikics E, Haller J, Yasar S, Tanda G, Goldberg SR. The endogenous cannabinoid anandamide has effects on motivation and anxiety that are revealed by fatty acid amide hydrolase (FAAH) inhibition. *Neuropharmacology*. 2008 Jan;54(1):129-40.
54. Solinas M, Scherma M, Tanda G, Wertheim CE, Fratta W, Goldberg SR. Nicotinic facilitation of {delta}9-tetrahydrocannabinol discrimination involves endogenous anandamide. *J Pharmacol Exp Ther*. 2007 Jun;321(3):1127-34.
55. Solinas M, Scherma M, Fattore L, Stroik J, Wertheim C, Tanda G, Fratta W, Goldberg SR. Nicotinic alpha7 receptors as a new target for treatment of cannabis abuse. *J Neurosci*. 2007 May 23;27(21):5615-20.
56. Fadda P, Scherma M, Spano MS, Salis P, Melis V, Fattore L, Fratta W. Cannabinoid self-administration increases dopamine release in the nucleus accumbens. *Neuroreport*. 2006 Oct 23;17(15):1629-32.
57. Fattore L, Deiana S, Spano MS, Cossu G, Fadda P, Scherma M, Fratta W. Endocannabinoid system and opioid addiction: Behavioural aspects. *Pharmacology, Biochemistry and Behavior* 2005 Jun;81 (2):343-59 Review.
58. Fadda P, Scherma M, Fresu A, Collu M, Fratta W. Dopamine and serotonin release in dorsal striatum and nucleus accumbens is differently modulated by morphine in DBA/2J and C57BL/6J mice. *Synapse*. 2005 Apr;56(1):29-38.
59. Fattore L, Cossu G, Spano MS, Deiana S, Fadda P, Scherma M, Fratta W. Cannabinoid and Reward: interaction with the opioid system *Crit Rev Neurobiol*. 2004;16(1-2):147-58. Review.

60. Fadda P, Scherma M, Fresu A, Collu M, Fratta W. Baclofen antagonizes nicotine-, cocaine-, and morphine-induced dopamine release in the nucleus accumbens of rat. *Synapse* 50:1-6 (2003).

**BOOK CHAPTERS:**

FADDA P, SCHERMA M. Tabacco in farmacologia: principi di base e applicazioni terapeutiche. In ROSSI F, CUOMO V, RICCARDI C (EDS): *Farmacologia. Principi di base e applicazioni terapeutiche*. Edizioni Minerva Medica, Torino, In press

Maria Scherma, Roberto Collu, Valentina Satta, Elisa Giunti and Paola Fadda. *Animal Models of Eating Disorders (Book Chapter)*. *Psychiatric Disorders: Methods and Protocols, Methods in Molecular Biology*, vol. 2011, [https://doi.org/10.1007/978-1-4939-9554-7\\_17](https://doi.org/10.1007/978-1-4939-9554-7_17), © Springer Science+Business Media, LLC, part of Springer Nature 2019

Scherma, M., Satta, V., Fratta, W., Fadda, P. The endocannabinoid system: Anorexia nervosa and binge eating disorder (Book Chapter). *Cannabinoids in Neurologic and Mental Disease* 2105 pp. 389-413 Publisher: Elsevier Inc doi: 10.1016/B978-0-12-417041-4.00016-3.

Auber, A., Justinova, Z., Scherma, M., Goldberg, S.R., Panlilio, L.V. Cannabinoid-nicotine interactions (Book Chapter). *Cannabinoids in Neurologic and Mental Disease* 2105 pp. 339-413 Publisher: Springer New York doi: 10.1007/978-1-4939-2294-9.

**Contributions in Italian scientific journals:**

Mirko Manchia, Diego Primavera, Luca Deriu, Edoardo Caboni, Novella Iaselli, Davide Sunda, Massimo Tusconi, Roberto Collu, Maria Scherma, Alessio Squassina, Donatella Congiu, Paola Fadda, Walter Fratta, Bernardo Carpiniello. The impact of depot and long acting injectable antipsychotics on serum levels of brain-derived neurotrophic factor in schizophrenic and schizoaffective patients: results of a 24-month longitudinal prospective study. *Research and Advances in Psychiatry* 2018; 4(1):10-17.

Scherma M, Satta V, Fadda P. “Modelli animali e neurobiologia del binge eating disorder.” *Medicina delle Dipendenze*, Anno V- Numero 20 Dicembre 2015 ISSN 2039-7925

Scherma M, Goldberg SR. “Il sistema endocannabinoide: un nuovo target molecolare per il trattamento della dipendenza da nicotina” *Medicina delle Tossicodipendenze*, Settembre/Dicembre 2010 anno XVIII numero 68/69 ISSN-1125-9345

**INVITED SPEAKER AT CONFERENCES:**

2019. 39° Congress of the Italian Society of Pharmacology. “Possible role of the endocannabinoid system in the physiopathology of Anorexia Nervosa”

2021. 40° Congress of the Italian Society of Pharmacology: “Adolescent WIN 55, 212-2 pre-exposure affects subsequent responses to cocaine: behavioral and epigenetic studies”

2021. 19th SINS National Congress. “Cannabidiol and psychiatric disorders: therapeutic insights from preclinical evidence”

2022. 41° Congress of the Italian Society of Pharmacology. “Neurobiology of Anorexia Nervosa in a preclinical animal model”

2022. *Addiction* 2022. “Adolescent cannabinoid exposure and problematic patterns of drug use”.

2023. The 9th MNS Conference 2023. “Neurobiological and molecular mechanisms implicated in the development of anorexia nervosa: focus on the experimental model of Activity-Based-Anorexia (ABA)”

2024. Speaker al Satellite International Workshop, Obesity and Eating Disorders. “Utilizing Animal Models to Interrogate the Neurobiology of AN.”

**EDITORIAL DUTIES:**

Editorial Roles in MDPI: Section Board Member of Nutrients.

Topic Editor-in-Chief of Topic "Advances in Cannabinoid Research".  
Advances in Cannabinoid Research (mdpi.com)

Guest Editor of Special Issue "Brain and Food Motivation, Choice, and Eating Behavior";  
Nutrients.  
Nutrients | Special Issue: Brain and Food Motivation, Choice, and Eating Behavior (mdpi.com)

Review Editor in Frontiers in Behavioral Neuroscience: Motivation and Reward section; The  
Pathological Conditions section.  
Review Editor in Frontiers Neurodegeneration

**INSTITUTIONAL RESPONSIBILITIES:**

Member of the Organism for Animal Welfare (OPBA), University of Cagliari

**2020- present** Committee Member of the Ph.D. School in Neuroscience, Cagliari University

**TEACHING DUTIES:**

**AA 2024/2025**

GENERAL AND CLINICAL PHARMACOLOGY AND PHARMACOVIGILANCE -  
[MC/0405] PATHOLOGY AND PHARMACOLOGY  
Degree Course: NURSING , Faculty of Medicine and Surgery, University of Cagliari.

PHARMACOLOGY -  
[MC/0645] INTEGRATED MANAGEMENT OF DISABILITY  
Degree Course: PHYSIOTHERAPY , Faculty of Medicine and Surgery, University of Cagliari.

PHARMACOLOGY -  
[MC/0627] ELEMENTS OF CLINICAL MEDICINE  
Degree Course: "Tecniche della Prevenzione nell'Ambiente e nei Luoghi di Lavoro" Course, Faculty of Medicine and Surgery, University of Cagliari.

GENERAL PHARMACOLOGY  
Degree Course: MEDICINE AND SURGERY, University of Cagliari.

CLINICAL PHARMACOLOGY -  
[MC/0888] BIOCHEMISTRY AND CLINICAL PHARMACOLOGY  
Degree Course: BIOMEDICAL LABORATORY TECHNIQUES, Faculty of Medicine and Surgery, University of Cagliari.

PHARMACOLOGY -  
[MC/0862] ELEMENTS OF CLINICAL MEDICINE  
Degree Course: ASSISTENZA SANITARIA, Faculty of Medicine and Surgery, University of Cagliari.

**In compliance with the Italian legislative Decree no. 196 dated 30/06/2003, I hereby authorize you to use and process my personal details contained in this document.**

**Cagliari, 13/04/2025**

**Signature**

*Mona Shave*