DEPARTMENT OF PHYSIOLOGY AND PHARMACOLOGY "V. ERSPAMER"

SILVANA GAETANI

Date of birth: July 8th, 1972

Place of birth: Lecce, Italy

Married, with two children (2012 and 2014)

Current Position: Associate Professor of Pharmacology, Sapienza University of Rome

WORK ADDRESS:

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EDUCATION

-1998: Master in Biological Sciences *magna cum laude*. Univ. of Lecce Italy

-2000: Board Certified Biologist (Full score). Univ. of Bari, Italy

-2003: Ph.D in Pharmacology. Univ. of Bari Italy, School of Medicine

OTHER QUALIFICATIONS

-Graduate Minor in Bioethics, Univ. of Lecce, Italy

-First Certificate in English, Univ. of Cambridge, UK

-Accent reduction II for nonnative English speakers, Univ. of California Irvine, USA

ACADEMIC HISTORY

-2001-2003: Junior Specialist Univ. of California Irvine, Dept. of Pharmacology.

-2003-2004: Post Doctoral fellow step III Univ. of California Irvine, Dept. of Pharmacology.

-2004-2005: Adjunct Assistant Professor of Pharmacology "Brain Gain program" (Rientro dei Cervelli), Dept. of Physiology and Pharmacology "V. Erspamer", Sapienza Univ. of Rome, Italy

-2005-2012: Assistant Professor of Pharmacology, Dept. of Physiology and Pharmacology "V. Erspamer", Sapienza Univ. of Rome, Italy

-2012-present: Associate Professor of Pharmacology, Dept. of Physiology and Pharmacology "V. Erspamer", Sapienza Univ. of Rome, Italy

-March 2017-present: National Scientific Qualification as full Professor in Pharmacology (Abilitazione Scientifica Nazionale per Professore I fascia SSD BIO/14 SSC 05/G1)

MANDATORY MATERNITY LEAVE (L. 1204/1971)
from 24/05/2014 to 23/10/2014 (5 months)
from 15/05/2012 to 14/10/2012 (5 months)

AWARDS AND RESEARCH GRANTS OBTAINED AS COORDINATOR AND/OR PRINCIPAL INVESTIGATOR

-2001: Short-Term Fellowship for Specialized Studies Abroad, Italian Society of Pharmacology.

-2004-2008: Italian Ministry of University and Research (MIUR), "Brain Gain Program" (Programma Rientro dei Cervelli) (€139000)

-2005: NIDA-IUPHAR Travel Award, National Institute on Drug Abuse, USA

-2007-2008: Sapienza Univ. Intramural Research Grant (RICERCHE DI ATENEO FEDERATO) (€5300)

-2008: Selected Researcher for "Atomium Culture: the permanent platform for European excellence"

-2007-2009: (NATIONAL COORDINATOR) MIUR, National Research Grant (PRIN) (€158000)

-2013-2017 (PRINCIPAL INVESTIGATOR) MIUR: Futuro in Ricerca (€228798)

-2014-2018: (PRINCIPAL INVESTIGATOR) MIUR, National Research Grant (PRIN) (€103386)

-2013-2014: Sapienza Univ. Intramural Research Grant (RICERCHE UNIVERSITARIE 2013) (€25946)

-2017-2020: (PRINCIPAL INVESTIGATOR) MIUR, National Research Grant (PRIN) (€ 40000)

RESEARCH GRANTS OBTAINED AS PARTICIPANT

-2005-2006: Sapienza Univ. Intramural Research Grant (RICERCHE UNIVERSITARIE 2005) (€28500)

-2006-2008: Sapienza Univ. Intramural Research Grant (RICERCHE UNIVERSITARIE 2006-2007) (€43600-€18000)

-2007-2010 MIUR FIRB, Piattaforme Reti (€228154)

-2008-2010: Sapienza Univ. Intramural Research Grant (RICERCHE UNIVERSITARIE 2008-2009) (€27000-€20000)

-2010-2011: Sapienza Univ. Intramural Research Grant (RICERCHE UNIVERSITARIE 2010) (€31500)

-2011-2013: MIUR, National Research Grant (PRIN) (€ 79984)

SCIENTIFIC PRODUCTION

SG is author of 68 papers published in peer reviewed journals included in the most important databases (SCOPUS, ISI, PUBMED), which include papers published in high impact journals (Nature, Nature Medicine, Cell Metabolism, Journal of Biological Chemistry, Trends in Molecular Medicine, Journal of Neuroscience, Neuropsychopharmacology, PNAS, Neuroscience & Biobehavioural Reviews) with a total number of 4564 citations (database: SCOPUS).

SG is author, also, of more than 100 abstracts presented (also upon invitation) in prestigious national and international scientific meetings (e.g. The Neuroscience meeting held by the Society

for Neurocience; The World Congress of Pharmacology; The meeting of the International Cannabinoid Society, etc).

SG is author of two books on the Basic principles of Pharmacology for Master Students

SG gave 8 invited plenary lectures at Italian and International Universities (including Wakayama Medical Univ., Japan, Univ. of Lille, France, and European Research Institute of Rome, Italy).

SG is author of 2 international patents

OTHER SCIENTIFIC ACTIVITIES:

-2007: CHAIR of the Scientific Organizing Committee of the Workshop of the Italian Society of Pharmacology: “Behavioral and metabolic aspects of obesity and eating disorders”, Rome March 17th, 2007

-2012: CHAIR of the Scientific Organizing Committee of the Workshop of the European Behavioural Pharmacology Society: “Eating Behaviour and obesity, Lecce, 7-9 September 2012

-2013-2015-2017: CHAIR of the Scientific Organizing Committee of three Symposia within the Biennial meeting of the Italian Society of Pharmacology

-2016: CHAIR of the Scientific Organizing Committee of a Symposium within the Annual meeting of the Italian Society for Neuroscience

-2017: CHAIR of the Scientific Organizing Committee of a Symposium within the Biennial meeting of the European Behavioural Pharmacology Society

-2008-present ACADEMIC EDITOR for the Journal “Plos One”

-2013-present ASSOCIATE EDITOR for the Journal Frontiers in Pharmacology, section Experimental Pharmacology and Drug Discovery

-2015-present MEMBER OF THE EDITORIAL BOARD of the “Journal of Drug Research and Development”

-2012-2015 MEMBER OF THE EDITORIAL BOARD of the Journal “Behavioural Pharmacology”

-2012 GUEST EDITOR for the special issue of the Journal “Behavioural Pharmacology” titled “Pharmacological Approaches to Feeding Behaviour and Eating Disorders”

-2015: GRANT REFEREE for the FRENCH NATIONAL RESEARCH AGENCY (ANR)

-2004-present REFEREE for numerous scientific journals, including high impact journals

TEACHING ACTIVITY

-Research Supervisor of Pharmacology” for undergraduate students of Biological Sciences (January 2002-June 2004) Univ. of California Irvine, USA

-“Course of Pharmacology II” of the Master Course in Pharmaceutical Biotechnology (September 2004-September 2010) Faculty of Pharmacy, Sapienza Univ. of Rome

-Course of “Experimental and Clinical Pharmacokinetics” of the Master Course in Medicinal Chemistry (November 2006-October 2008, October 2011-September 2012) Faculty of Pharmacy and Medicine, Sapienza Univ. of Rome

-Course of “Special Pharmacology, pharmacotherapy and Pharmacological Biotechnology” Master Course in Pharmaceutical Biotechnology (October 2010-present) Faculty of Pharmacy and Medicine, Sapienza Univ. of Rome

-Course of “General and Molecular Pharmacology” Master Course in Pharmacy (October 2012-December 2017) Faculty of Pharmacy and Medicine, Sapienza Univ. of Rome

-Course of “Pharmacovigilance” Undergraduate Course in Applied Pharmacological Sciences (October 2013-September 2017) Faculty of Pharmacy and Medicine, Sapienza Univ. of Rome

-Course of “Preclinical and clinical pharmacological research” Master Course in Genetics and Molecular Biology in the Basic and Biomedical Research (October 2015-September 2016) Faculty of Sciences, Sapienza Univ. of Rome

-Course of “Pharmacology in drug Discovery” English Master Course in Genetics and Molecular Biology (October 2016-present) Faculty of Sciences, Sapienza Univ. of Rome

- Course of “Special Pharmacology and pharmacotherapy Master Course in Pharmacy (from March 2018) Faculty of Pharmacy and Medicine, Sapienza Univ. of Rome

-“Course of in vivo techniques for the evaluation of xenobiotic activity” PhD program in Toxicology (2013-July 2017), Sapienza Univ. of Rome

MENTORSHIP ACTIVITY (2005-PRESENT)

-Mentor of 13 PhD students at Sapienza Univ. of Rome (2006-present)

-Mentor of 50 master thesis in Pharmaceutical Biotechnology, Medicinal Chemistry, Pharmacy, Neurobiology, at Sapienza Univ. of Rome (2005-present)

-Mentor of the research activity conducted by Ms Jessica de Sá, Visiting Brasilian Student according to the mobility program “science without borders” (20/01/2015 al 19/06/2015)

-Mentor of the research activity conducted by Ms Tatiana Soares Costa, Visiting Biochemistry Student from University of Coimbra, Partugal according to the Erasmus Plus program (01/10/2016-31/06/2017)

- Mentor of the research activity conducted by Ms Vera Weinberg, Visiting Pharmacy Student from Utrecht University, the Netherlands according to the Erasmus Plus program (13/02/2017-13/08/2017)

OTHER ACADEMIC ACTIVITIES

-2017-present: Nominated Secretary (Referente) of the Ph.D program in Toxicology, Sapienza Univ. of Rome

-2006-present: Member of the Board of Professors of the Ph.D program in Toxicology, Sapienza Univ. of Rome

-2008-2012 and 2017-present: ELECTED MEMBER OF THE DEPARTMENT ADVISORY BOARD (Giunta di Dipartimento) of the Dept. of Physiology and Pharmacology “V. Erspamer”, Sapienza Univ. of Rome

-2017-present: ELECTED MEMBER OF THE FACULTY ADVISORY BOARD (Giunta di Facoltà) Faculty of Pharmacy and Medicine, Sapienza Univ. of Rome

-2008-present: ELECTED MEMBER OF DIDACTIC COMMITTEE Master Course in Pharmaceutical Biotechnology, Faculty of Pharmacy and Medicine, Sapienza Univ. of Rome

-2011-2012: MEMBER OF THE RESEARCH COMMITTEE of Sapienza Univ. of Rome

-2012-present: coordinator of the didactic quality team of the Master Course in Pharmaceutical Biotechnology, Faculty of Pharmacy and Medicine, Sapienza Univ. of Rome

-2014-present: member of the "ANIMAL WELFARE BODY" (OBPA) of the Dept. of Physiology and Pharmacology "V. Erspamer", Sapienza Univ. of Rome

-2015-present: member of the ACADEMIC COMMITTEE for the evaluation of the PHARMACY PROFESSIONAL TRAINING, Faculty of Pharmacy and Medicine, Sapienza University of Rome

-2017-present: member of the PhD STEERING COMMITTEE (Comite d'accompagnement), Universitè Catholique de Louvain

LIST OF PUBBLICATIONS

1. Trabace L, Coluccia A, **Gaetani S**, Tattoli M, Cagiano R, Pietra C, Kendrick KM, Cuomo V. *In vivo neurochemical effects of the acetylcholinesterase inhibitor ENA713 in rat hippocampus*. ***Brain Research*** 2000 865(2):268-71.
2. Tattoli M, Cagiano R, **Gaetani S**, Ghiglieri V, Giustino A, Mereu G, Trabace L, Cuomo V. *Neurofunctional effects of developmental alcohol exposure in alcohol-preferring and alcohol-nonpreferring rats*. ***Neuropsychopharmacology*** 2001 24(6):691-705.
3. Rodriguez de Fonseca F, Navarro M, Gomez R, Escuredo L, Nava F, Fu J, Murillo-Rodriguez E, Giuffrida A, LoVerme J, **Gaetani S**, Kathuria S, Gall C, Piomelli D. *An anorexic lipid mediator regulated by feeding*. ***Nature*** 2001 414(6860):209-12.
4. Cagiano R, Cassano T, Coluccia A, **Gaetani S**, Giustino A, Steardo L, Tattoli M, Trabace L, Cuomo V. *Genetic factors involved in the effects of developmental low-level alcohol induced behavioral alterations in rats*. ***Neuropsychopharmacology*** 2002 26(2):191-203.
5. Kathuria S, **Gaetani S**, Fegley D, Valino F, Duranti A, Tontini A, Mor M, Tarzia G, Rana GL, Calignano A, Giustino A, Tattoli M, Palmery M, Cuomo V, Piomelli D. *Modulation of anxiety through blockade of anandamide hydrolysis*. ***Nature Medicine*** 2003 9(1):76-81.
6. **Gaetani S**, Oveisi F and Piomelli D. *Modulation of meal pattern in the rat by the anorexic lipid mediator oleoylethanolamide*. ***Neuropsychopharmacology*** 2003 28(7):1311-6.
7. Fu J, **Gaetani S**, Oveisi F, Lo Verme J, Serrano A, Rodriguez De Fonseca F, Rosengarth A, Luecke H, Di Giacomo B, Tarzia G, Piomelli D. *Oleylethanolamide regulates feeding and body weight through activation of the nuclear receptor PPAR-alpha*. ***Nature*** 2003 425(6953):90-3.
8. **Gaetani S**, Cuomo V, Piomelli D. *Anandamide hydrolysis: a new target for anti-anxiety drugs?* ***Trends in Molecular Medicine*** 2003 9(11):474-8.
9. Oveisi F, **Gaetani S**, Eng KTP, Piomelli D *Oleoylethanolamide inhibits food intake in free-feeding rats after oral administration*. ***Pharmacological Research*** 2004 49(5):461-466.
10. Fegley D, **Gaetani S**, Duranti A, Tontini A, Mor M, Tarzia G, Piomelli D *Characterization of the fatty-acid amide hydrolase inhibitor URB597: Effects on anandamide and oleoylethanolamide deactivation*. ***Journal of Pharmacology and Experimental Therapeutics*** 2005 313(1):352-8
11. LoVerme J, **Gaetani S**, Fu J, Oveisi F, Burton K and Piomelli D *Regulation of food intake by oleoylethanolamide* ***Cellular and Molecular Life Sciences*** 2005 62(6):708-16
12. Fu J, Oveisi F, **Gaetani S**, Lin E, Piomelli D. *Oleoylethanolamide, an endogenous PPAR-alpha agonist, lowers body weight and hyperlipidemia in obese rats*. ***Neuropharmacology***. 2005 48(8):1147-53

13. Astarita G, Di Giacomo B, **Gaetani S**, Oveisi F, Compton TR, Rivara S, Tarzia G, Mor M, Piomelli D. *Pharmacological characterization of hydrolysis-resistant analogs of oleoylethanolamide with potent anorexiant properties*. ***Journal of Pharmacology and Experimental Therapeutics*** 2006 318(2):563-70

14. Loverme J, Guzman M, **Gaetani S**, Piomelli D. *Cold exposure stimulates synthesis of the bioactive lipid oleoylethanolamide in rat adipose tissue*. ***Journal of Biological Chemistry*** 2006 281(32):22815-8

15. Fu J, Astarita G**, Gaetani S**, Kim J, Cravatt BF, Mackie K, Piomelli D. *Food intake regulates oleoylethanolamide formation and degradation in the proximal small intestine.* ***Journal of Biological Chemistry*** 2007 282(2):1518-28

16. Campolongo P, Trezza V, Cassano T, **Gaetani S**, Morgese MG, Ubaldi M, Soverchia L, Antonelli T, Ferraro L, Massi M, Ciccocioppo R, Cuomo V. *Perinatal exposure to delta-9-tetrahydrocannabinol causes enduring cognitive deficits associated with alteration of cortical gene expression and neurotransmission in rats*. ***Addiction Biology*** 2007 12(3-4):485-95

17. Castaldo P, Magi S, **Gaetani S**, Cassano T, Ferraro L, Antonelli T, Amoroso S, Cuomo V. *Prenatal exposure to the cannabinoid receptor agonist WIN 55,212-2 increases glutamate uptake through overexpression of GLT1 and EAAC1 glutamate transporter subtypes in rat frontal cerebral cortex*. ***Neuropharmacology***. 2007 53(3):369-78

18. Trezza V, Campolongo P, Cassano T, MachedaT, Dipasquale P, Carratù MR, **Gaetani S**, Cuomo V. *Effects of perinatal exposure to delta-9-tetrahydrocannabinol on the emotional reactivity of the offspring: a longitudinal behavioral study in wistar rats.* ***Psychopharmacology*** *2008,* 198(4):529-37

19. **Gaetani S**, Kaye W, Cuomo V, Piomelli D. *Role of endocannabinoids and their analogues in obesity and eating disorders*. ***Eating and weight disorders*** 2008, 13(3):e42-8

20. Schwartz GJ, Fu J, Astarita G, Xiaosong Li[1], **Gaetani S**, Campolongo P, Cuomo V, Piomelli D. *The lipid messenger OEA links dietary fat intake to satiety*. ***Cell Metabolism*** 2008, 8(4):281-8

21. Morgese MG, Cassano T, **Gaetani S**, Macheda T, Laconca L, Dipasquale P, Ferraro L, Antonelli T, Cuomo V, Giuffrida A. *Neurochemical changes in the striatum of dyskinetic rats after administration of the cannabinoid agonist WIN55,212-2*. ***Neurochemistry International*** 2009 54(1):56-64

22. Ferraro L, Tomasini Mc, Tanganelli S, Mazza R, Coluccia A, Carratu' MR, **Gaetani S**, Cuomo V, Antonelli T. *Developmental exposure to methylmercury elicits early cell death in the cerebral cortex and long-term memory deficits in the rat*. ***International Journal of Developmental Neuroscience*** 2009 27: 165–174

23. Celentano M, Caprioli D, Di Pasquale P, Cardillo V, Nencini P, **Gaetani S**, Badiani A. *Drug context differently regulates cocaine versus heroin self-administration and cocaine- versus heroin-induced Fos mRNA expression in the rat*. ***Psychopharmacology*** 2009, 204(2):349-60

24. Antonelli T, Tomasini MC, Mazza R, Fuxe K, **Gaetani S**, Cuomo V, Tanganelli S, Ferraro L. *Cannabinoid CB1 and Cholecystokinin CCK2 receptors modulate, in an opposing way, electrically-evoked [3H]GABA efflux from rat cerebral cortex cell cultures. Possible relevance for cortical GABA transmission and anxiety*. ***Journal of Pharmacology and Experimental Therapeutics*** 2009, 329(2):708-17

25. **Gaetani S**, Dipasquale P, Romano A, Righetti L, Cassano T, Piomelli D and Cuomo V. *The endocannabinoid system as a target for novel anxiolytic and antidepressant drugs*. ***International Review of Neurobiology*** 2009, 85: 57-72

26. Cassano T*****, **Gaetani S***, Morgese MG, Macheda T, Laconca L, Dipasquale P, Taltavull J, Shippenberg TS, Cuomo V, Gobbi G *Monoaminergic changes in locus coeruleus and dorsal raphe nucleus following noradrenaline depletion.* ***Neurochemical Research*** 2009 34(8):1417-26 *****equal contribution

27. Ferraro L, Tomasini MC, Beggiato S, **Gaetani S**, Cassano T, Cuomo V, Amoroso S, Tanganelli S, Antonelli T. *Short- and long-term consequences of prenatal exposureto the cannabinoid agonist WIN55,212-2 on rat glutamate transmission and cognitive functions*. ***Journal of Neural Transmission*** 2009, 116(8): 1017-27

28. vanRijn CM, **Gaetani S**, Santolini I, Badura A, Gabova A, Fu J, Watanabe M, Cuomo V, vanLuijtelaar G, Nicoletti F, and Ngomba RT W*ag/rij rats show a reduced expression of CB_1 receptors in thalamic nuclei and respond to the CB_1 receptor agonist, R(+)WIN55,212-2, with a reduced incidence of spike-wave discharges.* ***Epilepsia*** 2010 51(8):1511-21

29. **Gaetani S**, Fu J, Cassano T, Dipasquale, Romano A, Righetti L, Cianci S, Laconca L, Giannini E, Scaccianoce S, Mairesse J, Cuomo V, and Piomelli D *The fat-induced satiety factor OEA suppresses feeding through central release of oxytocin.* ***Journal of Neuroscience*** 2010 30(24):8096-101

30. Cassano T*, **Gaetani S***, Macheda T, Laconca L, Romano A, Morgese MG, Cimmino CS, Chiarotti F, Bambico FR, Gobbi G, Cuomo V, and Piomelli D *Evaluation of the emotional phenotype and serotonergic neurotransmission of fatty acid amide hydrolase-deficient mice.* ***Psychopharmacology***, 2010 *214(2):465-76* *****equal contribution

31. Dipasquale P, Romano A, Cianci S, Righetti L, **Gaetani S** *Oleoylethanolamide: a new player in energy metabolism control. Role in food intake* ***Drug Discovery Today: Disease Mechanisms*** *2011*, *7(3–4): e159-e226*

32. Fu J, DiPatrizio NV, Guijarro A, Schwartz GJ, Li X, **Gaetani S**, Astarita G, Piomelli D *Sympathetic activity controls fat-induced OEA signaling in small intestine* **Journal of Neuroscience** 2011 31(15):5730-6

33. Cassano T, Romano A, Macheda T, Colangeli R, Cimmino CS, Petrella A, LaFerla FM, Cuomo V, **Gaetani S** *Olfactory memory is impaired in a triple transgenic model of Alzheimer disease*, **Behavioural Brain Research** 2011, 31;224(2):408-12

34. Trapani A, De Giglio E, Cafagna D, Denora N, Agrimi G, Cassano T, **Gaetani S**, Cuomo V, Trapani G. *Characterization and evaluation of chitosan nanoparticles for dopamine brain delivery*. **International Journal of Pharmaceutics**. 2011 419(1-2):296-307

35. Cassano T, Serviddio G, **Gaetani S**, Romano A, Dipasquale P, Cianci S, Bellanti F, Laconca L, Romano AD, Padalino I, LaFerla FM, Nicoletti F, Cuomo V, Vendemiale V *Glutamatergic alterations and mitochondrial impairment in a murine model of Alzheimer disease* **Neurobiology of Aging** 2012 33(6):1121.e1-12

36. Mairesse J, Silletti V, Laloux C, Zuena AR, Giovine A, Consolazione M, van Camp G, Malagodi M, **Gaetani S**, Cianci S, Catalani A, Mennuni G, Mazzetta A, van Reeth O, Gabriel C, Mocaër E, Nicoletti F, Morley-Fletcher S, Maccari S. *Chronic agomelatine treatment corrects the abnormalities in the circadian rhythm of motor activity and sleep/wake cycle induced by prenatal restraint stress in adult rats*. **International Journal of Neuropsychopharmacology** 2013 16(2):323-38

37. Romano A, Cassano T, Tempesta B, Cianci S, Dipasquale P, Coccurello R, Cuomo V, **Gaetani S**. *The satiety signal oleoylethanolamide stimulates oxytocin neurosecretion from rat hypothalamic neurons*. **Peptides**. 2013 49C:21-26

38. Romano A, Potes CS, Tempesta B, Cassano T, Cuomo V, Lutz T, **Gaetani S**. *Hindbrain noradrenergic input to the hypothalamic PVN mediates the activation of oxytocinergic neurons induced by the satiety factor oleoylethanolamide*. **American Journal of Physiology-Endocrinology And Metabolism**. 2013. 305(10):E1266-73

39. Aureli C, Cassano T, Masci A, Francioso A, Martire S, Cocciolo A, Chichiarelli S, Romano A, **Gaetani S**, Mancini P, Fontana M, d'Erme M, Mosca L. *5-S-Cysteinyldopamine neurotoxicity: influence on the expression of alpha-Synuclein and of ERp57 in cellular and animal models of Parkison's disease*. **Journal of Neuroscience Research**. 2014 92(3):347-58

40. Bedse G, Romano A, Cianci S, Lavecchia AM, Pace L, Elphick MR, LaFerla FM, Vendemiale G, Grillo C, Altieri F, Cassano T and **Gaetani S**. *Altered expression of the CB1 cannabinoid receptor in the triple transgenic mouse model of Alzheimer's disease*. **Journal of Alzheimers Disease**. 2014 40(3):701-12

41. Schepisi C Cianci S, Bedse G, Fu J, **Gaetani S**, Nencini P. *Differences in the structure of drinking, cart expression and dopamine turnover between polydipsic and non polydipsic rats in the quinpirole model of psychotic polydipsia*. **Psychopharmacology**. 2014 231(19):3889-97

42. Romano A, Coccurello R, Giacovazzo G, Bedse G, Moles A and **Gaetani S**. *Oleoylethanolamide: a novel potential pharmacological alternative to cannabinoid antagonists for the control of appetite.* **BioMed Research International** (formerly titled Journal of Biomedicine and Biotechnology) 2014 *2014:203-425*

43. Romano A, Karimian Azarib E, Tempesta B, Mansourib A, Micioni Di Bonaventura MV, Ramachandran D, Lutz TA, Bedse G, Langhans W, and **Gaetani S**. *High dietary fat intake influences the activation of specific hindbrain and hypothalamic nuclei by the satiety factor oleoylethanolamide*. **Physiology & Behavior** 2014 *136:55-62.*

44. Karimian Azari E, Ramachandran D, Weibel S, Arnold M, Romano A**, Gaetani S**, Langhans W, and Mansouri A. *Vagal afferents are not necessary for the satiety effect of the gut lipid messenger oleoylethanolamide (OEA).* **American Journal Of Physiology-Regulatory Integrative And Comparative Physiology** 2014 307(2):R167-78

45. Bedse G, Colangeli R, Lavecchia AM, Romano A, Altieri F, Cifani C, Cassano T, **Gaetani S**. *Role of the basolateral amygdala in mediating the effects of the fatty acid amide hydrolase inhibitor URB597 on HPA axis response to stress.* **European Neuropsychopharmacology** 2014 24(9):1511-23

46. Provensi G, Munari L, Umehara H, Coccurello R, Giacovazzo G, Galeotti N, Nosi D, **Gaetani S**, Romano A, Moles A, Blandina P and Passani MB. *The satiety factor oleoylethanolamide recruits the brain histaminergic system to inhibit food intake*, **Proceedings Of The National Academy Of Sciences Of The United States Of America.** 2014, 111(31):11527-32

47. Micioni Di Bonaventura MV, Ciccocioppo R, Romano A, Bossert J, Rice K, Ubaldi M, St. Laurent R, **Gaetani S**, Massi M, Shaham Y, Cifani C. *Role of bed nucleus of the stria terminalis corticotrophin-releasing factor receptors in frustration stress-induced binge-like palatable food consumption in female rats with a history of food restriction.* **Journal of Neuroscience** 2014, 34:11316-24.

48. D'Addario C, Micioni Di Bonaventura MV, Pucci M, Romano A, **Gaetani S**, Ciccocioppo R, Cifani C, Maccarrone M. *Endocannabinoid signaling and food addiction.* **Neuroscience And Biobehavioral Reviews**. 2014 47C:203-224
49. Michetti C, Romano E, Altabella L, Caruso A, Castelluccio P, Bedse G, **Gaetani S**, Canese R, Laviola G, Scattoni ML. *Mapping pathological phenotypes in reelin mutant mice.* **Frontiers in Pediatrics**. 2014 2:95
50. Mancuso C and **Gaetani S**. *Preclinical and clinical issues in Alzheimer's disease drug research and development.* **Frontiers in Pharmacology**. 2014 5:234
51. Romano A, Pace L, Tempesta B, Lavecchia AM, Macheda T, Bedse G, Petrella A, Vendemiale G, **Gaetani S**, Cassano T. *Depressive-like behaviour is paired to monoaminergic alteration in a murine model of Alzheimer's disease.* **International Journal of Neuropsychopharmacology** 2014 31;18(4)
52. Bedse G, Romano A, Lavecchia AM, Cassano T and **Gaetani S**. *The role of endocannabinoid signaling in the molecular mechanisms of neurodegeneration in Alzheimer disease.* **Journal of Alzheimer's disease** 2015 43(4):1115-36
53. Stoppoloni D, Politi L, Leopizzi M, **Gaetani S**, Guazzo R, Basciani S, Moreschini O, De Santi M, Scandurra R, Scotto d'Abusco A. *Effect of glucosamine and its peptidyl-derivative on the production of extracellular matrix components by human primary chondrocytes.* **Osteoarthritis and Cartilage**. 2015 23(1):103-13
54. Bedse G, Romano A, Tempesta B, Lavecchia M, Pace L, Bellomo A, Duranti A, Micioni di Bonaventura MV, Cifani C, Cassano T, **Gaetani S**. *Inhibition of anandamide hydrolysis enhances noradrenergic and GABAergic transmission in the prefrontal cortex and basolateral amygdala of rats subjected to acute swim stress*. **Journal of Neuroscience Research** 2015 93(5):777-87
55. Romano A, Tempesta B, Provensi G, Passani MB, **Gaetani S**. *Central mechanisms mediating the hypophagic effects of oleoylethanolamide and N-acylphosphatidylethanolamines: different lipid signals?* **Frontiers in Pharmacology.** 2015 6:137. doi: 10.3389/fphar.2015.00137.
56. Giudetti AM, Romano A, Lavecchia AM, **Gaetani S**. *The role of brain cholesterol and its oxidized products in Alzheimer's disease*. **Current Alzheimer Research** 2016;13(2):198-205
57. Cassano T, Pace L, Bedse G, Lavecchia AM, De Marco F, **Gaetani S**, Serviddio G. *Glutamate and Mitochondria: Two Prominent Players in the Oxidative Stress-Induced Neurodegeneration*. **Current Alzheimer research**. 2016 13(2):185-97
58. Romano A, Tempesta B, Micioni Di Bonaventura MV and **Gaetani S**. *From Autism to Eating Disorders and More: The Role of Oxytocin in Neuropsychiatric Disorders*. **Frontiers in neuroscience** 2016 9:497
59. Gatta E, Lefebvre T, **Gaetani S**, Dos Santos M, Marrocco J, Cassano T, Nicoletti F, Maccari S, Mairesse J *Evidence for an imbalance between tau O-GlcNAcylation and phosphorylation in the hippocampus of a mouse model of Alzheimer's disease*. **Pharmacological Research** 2016 105:186-197
60. **Gaetani S** and Cassano T. *From obesity resistance to obesity prediction and prevention?* **Frontiers in Neuroscience** 2016 10:369
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