

INFORMAZIONI PERSONALI



Maria Luisa Scattoni

 Via delle Sogliole 21, 00054, Fiumicino, Italia

 06-49903143  347-8155138

Codice Fiscale SCTMLS73M62L182F

 marialuisa.scattoni@iss.it

Sesso Femminile | Data di nascita 22/08/1973 | Nazionalità Italiana

POSIZIONE RICOPERTA

Ricercatore, Servizio di Coordinamento e Supporto alla Ricerca, Istituto Superiore di Sanità

ESPERIENZA PROFESSIONALE

- 2018-ad oggi **Ricercatore**
Servizio di Coordinamento e Supporto alla Ricerca, Istituto Superiore di Sanità
- 2011 - 2017 **Ricercatore TD**
Dipartimento di Biologia cellulare e Neuroscienze, Istituto Superiore di Sanità
- 2006-2011 **Collaboratore Tecnico Ente di Ricerca**
Dipartimento di Biologia cellulare e Neuroscienze, Istituto Superiore di Sanità
- 2002-2006 **Ricercatore (co.co.co)**
Dipartimento di Biologia cellulare e Neuroscienze, Istituto Superiore di Sanità

ISTRUZIONE E FORMAZIONE

- 2006-2009 **Postdoc in Behavioral Neuroscience**
National Institute of Mental Health-NIH, Bethesda (USA)
- 2005 **Visiting scientist presso il Brain Repair Centre**
Università di Cambridge
- 2002-2005 **Dottorato in Farmacologia, farmacognosia e tossicologia**
Università degli Studi di Roma "La Sapienza"
- 2004 **Abilitazione all'esercizio della professione di biologo**
Università degli Studi della Tuscia, Viterbo
- 2001 **Laurea in Scienze Biologiche, indirizzo Fisiopatologico**
Università degli Studi di Roma "La Sapienza"

COMPETENZE PERSONALI

Lingua madre Italiano

Altre lingue

COMPRESIONE	PARLATO	PRODUZIONE SCRITTA

	Ascolto	Letture	Interazione	Produzione orale	
Inglese	C1/C2	C1/C2	C1/C2	C1/C2	C1/C2

ULTERIORI INFORMAZIONI

Publicazioni

- 1: Esposito G, Hiroi N, Scattoni ML. Cry, baby, cry: Expression of Distress as a Biomarker and Modulator in Autism Spectrum Disorder. *Int J Neuropsychopharmacol.* 2017 Feb 15. doi: 10.1093/ijnp/pyx014.
- 2: Liska A, Bertero A, Gomolka R, Sabbioni M, Galbusera A, Barsotti N, Panzeri S, Scattoni ML, Pasqualetti M, Gozzi A. Homozygous Loss of Autism-Risk Gene CNTNAP2 Results in Reduced Local and Long-Range Prefrontal Functional Connectivity. *Cereb Cortex.* 2017 Feb 10:1-13.
- 3: Whittaker DE, Riegman KL, Kasah S, Mohan C, Yu T, Sala BP, Hebaishi H, Caruso A, Marques AC, Michetti C, Smachetti ME, Shah A, Sabbioni M, Kulhanci O, Tee WW, Reinberg D, Scattoni ML, Volk H, McGonnell I, Wardle FC, Fernandes C, Basson MA. The chromatin remodeling factor CHD7 controls cerebellar development by regulating reelin expression. *J Clin Invest.* 2017 Mar 1;127(3):874-887.
- 4: Cellot G, Maggi L, Castro MA, Catalano M, Migliore R, Migliore M, Scattoni ML, Calamandrei G, Cherubini E. Corrigendum: Premature changes in neuronal excitability account for hippocampal network impairment and autistic-like behavior in neonatal BTBR T+tf/J mice. *Sci Rep.* 2017 Jan 9;7:39726.
- 5: Provenzano G, Corradi Z, Monsomo K, Fedrizzi T, Ricceri L, Scattoni ML, Bozzi Y. Comparative Gene Expression Analysis of Two Mouse Models of Autism: Transcriptome Profiling of the BTBR and En2 (-/-) Hippocampus. *Front Neurosci.* 2016 Aug 25;10:396.
- 6: Cellot G, Maggi L, Di Castro MA, Catalano M, Migliore R, Migliore M, Scattoni ML, Calamandrei G, Cherubini E. Premature changes in neuronal excitability account for hippocampal network impairment and autistic-like behavior in neonatal BTBR T+tf/J mice. *Sci Rep.* 2016 Aug 16;6:31696.
- 7: Di Giorgio E, Frasnelli E, Rosa Salva O, Scattoni ML, Puopolo M, Tosoni D, NIDA-Network, Simion F, Vallortigara G. Corrigendum: Difference in Visual Social Predispositions Between Newborns at Low- and High-risk for Autism. *Sci Rep.* 2016 Jul 18;6:29860.
- 8: Homberg JR, Kyzar EJ, Scattoni ML, Norton WH, Pittman J, Gaikwad S, Nguyen M, Poudel MK, Ullmann JF, Diamond DM, Kaluyeva AA, Parker MO, Brown RE, Song C, Gainetdinov RR, Gottesman II, Kalueff AV. Genetic and environmental modulation of neurodevelopmental disorders: Translational insights from labs to beds. *Brain Res Bull.* 2016 Jul;125:79-91.
- 9: Homberg JR, Kyzar EJ, Nguyen M, Norton WH, Pittman J, Poudel MK, Gaikwad S, Nakamura S, Koshiba M, Yamanouchi H, Scattoni ML, Ullman JF, Diamond DM, Kaluyeva AA, Parker MO, Klimenko VM, Apryatin SA, Brown RE, Song C, Gainetdinov RR, Gottesman II, Kalueff AV. Understanding autism and other neurodevelopmental disorders through experimental translational neurobehavioral models. *Neurosci Biobehav Rev.* 2016 Jun;65:292-312.
- 10: Avvisati R, Contu L, Stendardo E, Michetti C, Montanari C, Scattoni ML, Badiani A. Ultrasonic vocalization in rats self-administering heroin and cocaine in different settings: evidence of substance-specific interactions between drug and setting. *Psychopharmacology (Berl).* 2016 Apr;233(8):1501-11.
- 11: Homberg JR, Kyzar EJ, Stewart AM, Nguyen M, Poudel MK, Echevarria DJ, Collier AD, Gaikwad S, Klimenko VM, Norton W, Pittman J, Nakamura S, Koshiba M, Yamanouchi H, Apryatin SA, Scattoni ML, Diamond DM, Ullmann JF, Parker MO, Brown RE, Song C, Kalueff AV. Improving treatment of neurodevelopmental disorders: recommendations based on preclinical studies. *Expert Opin Drug Discov.* 2016;11(1):11-25.
- 12: Costanzo V, Chericoni N, Amendola FA, Casula L, Muratori F, Scattoni ML, Apicella F. Early detection of autism spectrum disorders: From retrospective home video studies to prospective 'high risk' sibling studies. *Neurosci Biobehav Rev.* 2015 Aug;55:627-35.
- 13: De Felice A, Scattoni ML, Ricceri L, Calamandrei G. Prenatal exposure to a common organophosphate insecticide delays motor development in a mouse model of idiopathic autism. *PLoS One.* 2015 Mar 24;10(3):e0121663.
- 14: Sforazzini F, Bertero A, Doderò L, David G, Galbusera A, Bifone A, Scattoni ML, Pasqualetti M, Gozzi A. Erratum to: Altered functional connectivity networks in acallosal and socially impaired BTBR mice. *Brain Struct Funct.* 2016 Mar;221(2):1207.
- 15: Sforazzini F, Bertero A, Doderò L, David G, Galbusera A, Scattoni ML, Pasqualetti M, Gozzi A. Altered functional connectivity networks in acallosal and socially impaired BTBR mice. *Brain Struct Funct.* 2016 Mar;221(2):941-54.
- 16: De Felice A, Venerosi A, Ricceri L, Sabbioni M, Scattoni ML, Chiarotti F, Calamandrei G. Sex-dimorphic effects of gestational exposure to the organophosphate insecticide chlorpyrifos on social investigation in mice. *Neurotoxicol Teratol.* 2014 Nov-Dec;46:32-9.
- 17: 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. *Front Pediatr*. 2014 Sep 4;2:95
- 18: Squillace M, Doderò L, Federici M, Migliarini S, Errico F, Napolitano F, Krashia P, Di Maio A, Galbusera A, Bifone A, Scattoni ML, Pasqualetti M, Mercuri NB, Usiello A, Gozzi A. Dysfunctional dopaminergic neurotransmission in asocial BTBR mice. *Transl Psychiatry*. 2014 Aug 19;4:e427.
- 19: Huang H, Michetti C, Busnelli M, Managò F, Sannino S, Scheggia D, Giancarlo L, Sona D, Murino V, Chini B, Scattoni ML, Papaleo F. Chronic and acute intranasal oxytocin produce divergent social effects in mice. *Neuropsychopharmacology*. 2014 Apr;39(5):1102-14.
- 20: Doderò L, Damiano M, Galbusera A, Bifone A, Tsafaris SA, Scattoni ML, Gozzi A. Neuroimaging evidence of major morpho-anatomical and functional abnormalities in the BTBR T+TF/J mouse model of autism. *PLoS One*. 2013 Oct 16;8(10):e76655.
- 21: Wöhr M, Scattoni ML. Neurobiology of autism. *Behav Brain Res*. 2013 Aug 15;251:1-4.
- 22: Wöhr M, Scattoni ML. Behavioural methods used in rodent models of autism spectrum disorders: current standards and new developments. *Behav Brain Res*. 2013 Aug 15;251:5-17.
- 23: Romano E, Michetti C, Caruso A, Laviola G, Scattoni ML. Characterization of neonatal vocal and motor repertoire of reelin mutant mice. *PLoS One*. 2013 May 21;8(5):e64407.
- 24: Marco EM, Scattoni ML, Rapino C, Ceci C, Chaves N, Macrì S, Maccarrone M, Laviola G. Emotional, endocrine and brain anandamide response to social challenge in infant male rats. *Psychoneuroendocrinology*. 2013 Oct;38(10):2152-62.
- 25: Orlandi S, Manfredi C, Bocchi L, Scattoni ML. Automatic newborn cry analysis: a non-invasive tool to help autism early diagnosis. *Conf Proc IEEE Eng Med Biol Soc*. 2012;2012:2953-6.
- 26: Scattoni ML, Martire A, Cartocci G, Ferrante A, Ricceri L. Reduced social interaction, behavioural flexibility and BDNF signalling in the BTBR T+ tf/J strain, a mouse model of autism. *Behav Brain Res*. 2013 Aug 15;251:35-40.
- 27: Wöhr M, Silverman JL, Scattoni ML, Turner SM, Harris MJ, Saxena R, Crawley JN. Developmental delays and reduced pup ultrasonic vocalizations but normal sociability in mice lacking the postsynaptic cell adhesion protein neuroligin2. *Behav Brain Res*. 2013 Aug 15;251:50-64.
- 28: Yang M, Bozdagi O, Scattoni ML, Wöhr M, Rouillet FI, Katz AM, Abrams DN, Kalikhman D, Simon H, Woldeyohannes L, Zhang JY, Harris MJ, Saxena R, Silverman JL, Buxbaum JD, Crawley JN. Reduced excitatory neurotransmission and mild autism-relevant phenotypes in adolescent Shank3 null mutant mice. *J Neurosci*. 2012 May 9;32(19):6525-41.
- 29: Scheggia D, Sannino S, Scattoni ML, Papaleo F. COMT as a drug target for cognitive functions and dysfunctions. *CNS Neurol Disord Drug Targets*. 2012 May;11(3):209-21. Review. PubMed PMID: 22483296
- 30: Campolongo P, Ratano P, Manduca A, Scattoni ML, Palmery M, Trezza V, Cuomo V. The endocannabinoid transport inhibitor AM404 differentially modulates recognition memory in rats depending on environmental aversiveness. *Front Behav Neurosci*. 2012 Mar 20;6:11.
- 31: Scattoni ML. Special interest section on mouse ultrasonic vocalizations. *Genes Brain Behav*. 2011 Feb;10(1):1-3.
- 32: Bozdagi O, Sakurai T, Papapetrou D, Wang X, Dickstein DL, Takahashi N, Kajiwara Y, Yang M, Katz AM, Scattoni ML, Harris MJ, Saxena R, Silverman JL, Crawley JN, Zhou Q, Hof PR, Buxbaum JD. Haploinsufficiency of the autism-associated Shank3 gene leads to deficits in synaptic function, social interaction, and social communication. *Mol Autism*. 2010 Dec 17;1(1):15.
- 33: Feyder M, Karlsson RM, Mathur P, Lyman M, Bock R, Momenan R, Munasinghe J, Scattoni ML, Ihne J, Camp M, Graybeal C, Strathdee D, Begg A, Alvarez VA, Kirsch P, Rietschel M, Cichon S, Walter H, Meyer-Lindenberg A, Grant SG, Holmes A. Association of mouse Dlg4 (PSD-95) gene deletion and human DLG4 gene variation with phenotypes relevant to autism spectrum disorders and Williams' syndrome. *Am J Psychiatry*. 2010 Dec;167(12):1508-17.
- 34: Scattoni ML, Ricceri L, Crawley JN. Unusual repertoire of vocalizations in adult BTBR T+tf/J mice during three types of social encounters. *Genes Brain Behav*. 2011 Feb;10(1):44-56.
- 35: Lahvis GP, Alleva E, Scattoni ML. Translating mouse vocalizations: prosody and frequency modulation. *Genes Brain Behav*. 2011 Feb;10(1):4-16.
- 36: De Bartolo P, Cutuli D, Ricceri L, Gelfo F, Foti F, Laricchiuta D, Scattoni ML, Calamandrei G, Petrosini L. Does age matter? Behavioral and neuro-anatomical effects of neonatal and adult basal forebrain cholinergic lesions. *J Alzheimers Dis*. 2010;20(1):207-27
- 37: Malkesman O, Scattoni ML, Paredes D, Tragon T, Pearson B, Shaltiel G, Chen G, Crawley JN, Manji HK. The female urine sniffing test: a novel approach for assessing reward-seeking behavior in rodents. *Biol Psychiatry*. 2010 May 1;67(9):864-71.
- 38: Scattoni ML, Gasparini L, Alleva E, Goedert M, Calamandrei G, Spillantini MG. Early behavioural markers of disease in P301S tau transgenic mice. *Behav Brain Res*. 2010 Mar 17;208(1):250-7.
- 39: Chadman KK, Gong S, Scattoni ML, Boltuck SE, Gandhi SU, Heintz N, Crawley JN. Minimal aberrant behavioral phenotypes

- of neuroligin-3 R451C knockin mice. *Autism Res.* 2008 Jun;1(3):147-58.
- 40: Venerosi A, Ricceri L, Scattoni ML, Calamandrei G. Prenatal chlorpyrifos exposure alters motor behavior and ultrasonic vocalization in CD-1 mouse pups. *Environ Health.* 2009 Mar 30;8:12.
- 41: Maranghi F, Tassinari R, Lagatta V, Moracci G, Macri C, Eusepi A, Di Virgilio A, Scattoni ML, Calamandrei G. Effects of the food contaminant semicarbazide following oral administration in juvenile Sprague-Dawley rats. *Food Chem Toxicol.* 2009 Feb;47(2):472-9
- 42: Yang M, Scattoni ML, Zhodzishsky V, Chen T, Caldwell H, Young WS, McFarlane HG, Crawley JN. Social approach behaviors are similar on conventional versus reverse lighting cycles, and in replications across cohorts, in BTBR T+ tf/J, C57BL/6J, and vasopressin receptor 1B mutant mice. *Front Behav Neurosci.* 2007 Nov 2;1:1.
- 43: Scattoni ML, Crawley J, Ricceri L. Ultrasonic vocalizations: a tool for behavioural phenotyping of mouse models of neurodevelopmental disorders. *Neurosci Biobehav Rev.* 2009 Apr;33(4):508-15.
- 44: Scattoni ML, Gandhi SU, Ricceri L, Crawley JN. Unusual repertoire of vocalizations in the BTBR T+tf/J mouse model of autism. *PLoS One.* 2008 Aug 27;3(8):e3067.
- 45: Scattoni ML, McFarlane HG, Zhodzishsky V, Caldwell HK, Young WS, Ricceri L, Crawley JN. Reduced ultrasonic vocalizations in vasopressin 1b knockout mice. *Behav Brain Res.* 2008 Mar 5;187(2):371-8.
- 46: Domenici MR, Scattoni ML, Martire A, Lastoria G, Potenza RL, Borioni A, Venerosi A, Calamandrei G, Popoli P. Behavioral and electrophysiological effects of the adenosine A2A receptor antagonist SCH 58261 in R6/2 Huntington's disease mice. *Neurobiol Dis.* 2007 Nov;28(2):197-205.
- 47: Ricceri L, Cutuli D, Venerosi A, Scattoni ML, Calamandrei G. Neonatal basal forebrain cholinergic hypofunction affects ultrasonic vocalizations and fear conditioning responses in preweaning rats. *Behav Brain Res.* 2007 Oct 1;183(1):111-7.
- 48: Martire A, Calamandrei G, Felici F, Scattoni ML, Lastoria G, Domenici MR, Tebano MT, Popoli P. Opposite effects of the A2A receptor agonist CGS21680 in the striatum of Huntington's disease versus wild-type mice. *Neurosci Lett.* 2007 Apr 24;417(1):78-83.
- 49: Scattoni ML, Valanzano A, Pezzola A, March ZD, Fusco FR, Popoli P, Calamandrei G. Adenosine A2A receptor blockade before striatal excitotoxic lesions prevents long term behavioural disturbances in the quinolinic rat model of Huntington's disease. *Behav Brain Res.* 2007 Jan 25;176(2):216-21.
- 50: Scattoni ML, Adriani W, Calamandrei G, Laviola G, Ricceri L. Long-term effects of neonatal basal forebrain cholinergic lesions on radial maze learning and impulsivity in rats. *Behav Pharmacol.* 2006 Sep;17(5-6):517-24. PubMed PMID: 16940773.
- 51: Pintor A, Tebano MT, Martire A, Grieco R, Galluzzo M, Scattoni ML, Pezzola A, Coccorello R, Felici F, Cuomo V, Piomelli D, Calamandrei G, Popoli P. The cannabinoid receptor agonist WIN 55,212-2 attenuates the effects induced by quinolinic acid in the rat striatum. *Neuropharmacology.* 2006 Oct;51(5):1004-12.
- 52: Bortolato M, Campolongo P, Mangieri RA, Scattoni ML, Frau R, Trezza V, La Rana G, Russo R, Calignano A, Gessa GL, Cuomo V, Piomelli D. Anxiolytic-like properties of the anandamide transport inhibitor AM404. *Neuropsychopharmacology.* 2006 Dec;31(12):2652-9.
- 53: Scattoni ML, Puopolo M, Calamandrei G, Ricceri L. Basal forebrain cholinergic lesions in 7-day-old rats alter ultrasound vocalisations and homing behaviour. *Behav Brain Res.* 2005 Jun 3;161(1):169-72.
- 54: Alleva E, Scattoni ML. Introductory keynote. The state of the art in animal experimentation. *Ann Ist Super Sanita.* 2004;40(2):151-5.
- 55: Ricceri L, Minghetti L, Moles A, Popoli P, Confaloni A, De Simone R, Piscopo P, Scattoni ML, di Luca M, Calamandrei G. Cognitive and neurological deficits induced by early and prolonged basal forebrain cholinergic hypofunction in rats. *Exp Neurol.* 2004 Sep;189(1):162-72.
- 56: Scattoni ML, Valanzano A, Popoli P, Pezzola A, Reggio R, Calamandrei G. Progressive behavioural changes in the spatial open-field in the quinolinic acid rat model of Huntington's disease. *Behav Brain Res.* 2004 Jul 9;152(2):375-83.
- 57: Scattoni ML, Calamandrei G, Ricceri L. Neonatal cholinergic lesions and development of exploration upon administration of the GABAa receptor agonist muscimol in preweaning rats. *Pharmacol Biochem* 2003 Sep;76(2):213-21.

Progetti

- 2016-2019: Coordinamento Progetto di rete, Bando finalizzata 2013 del Ministero della Salute "Italian Autism Spectrum Disorders Network: filling the gaps in the National Health System care".
- 2016-2018: Coordinamento Progetto finanziato dal Ministero della Salute "Osservatorio Italiano per il monitoraggio dei Disturbi dello Spettro Autistico".

- 2016-2018: Coordinamento Progetto finanziato dalla Fondazione Telecom Italia "Smart@pp: early screening for language delays and neurodevelopmental disorders".
- 2016-2019: Coordinamento Progetto finanziato dalla Fondazione Italiana per l'Autismo Onlus "Network Italiano per il riconoscimento precoce dei Disturbi dello Spettro Autistico".
- 2015-2017: Coordinamento Progetto "Ricerche e determinazioni per l'inserimento di bambini a rischio di Disturbi dello Spettro Autistico prima dei due anni in un programma di intervento terapeutico personalizzato", Associazione Bambini delle Fate.
- 2015-2018: Coordinamento Unità ISS Progetto DG Santè "Autism Spectrum Disorders in the European Union". L'ISS partecipa come ente collaboratore.
- 2015- 2018: Coordinamento Unità Operativa ESR5 nel Progetto europeo BRAINVIEW "Fetal ultrasound screening for Neurodevelopmental Disorders in normal and high-risk pregnancies", Marie-Curie ITN (Horizon2020).
- 2015-ad oggi: Coordinamento progetto di collaborazione tra Istituto Superiore di Sanità-World Health Organization (Office for the Eastern Mediterranean Region)- Autism Speaks "Assessment of health and social care policies and capacities of mental health and social care systems for provision of care for ASD".

Riconoscimenti e premi

- Vincitrice borsa di studio per la partecipazione al 4° convegno scientifico "Meccanismi molecolari in Neuroscienze", Milano 17 - 18 Giugno 2004.
- Vincitrice borsa di ricerca della Società Italiana di Farmacologia, Gennaio 2005.
- Howard Hughes Medical Research Institute Preceptor Award, Student Internship Program, Maggio 2007.
- "Cultore della materia" per il Corso di Etologia (titolare: Prof. Enrico Alleva) per la Laurea Triennale in Scienze Biologiche, della Facoltà di Scienze Matematiche, Fisiche e Naturali dell'Università degli Studi di Roma "Sapienza".
- Guest Editor della rivista Genes, Brain and Behavior per la preparazione della Special Interest Section on Mouse Ultrasonic Vocalizations pubblicata sul numero 10(1) di febbraio 2011.
- Vincitrice Bando Giovani Ricercatori 2008 del Ministero della Salute con il Progetto "Non invasive tools for early detection of Autism Spectrum Disorders".
- Editor per lo Special Issue "Neurobiology of Autism" per la rivista Behavioural Brain Research.
- Vincitrice Bando Programma Ccm 2012 del Ministero della Salute con il Progetto "Network Italiano per il riconoscimento precoce dei Disturbi dello spettro Autistico (NIDA)".
- Referee per le riviste: *Proceedings of the National Academy of Sciences of the United States of America (PNAS)*, Impact factor 9.432; *Journal of Neuroscience*, Impact factor 7.178, *PLoS One*, Impact factor 4.351; *Genes, Brain and Behavior*; Impact factor 3.795; *Biology Letters*, Impact factor 3.521; *Behavioural Processes*, Impact factor 1.527; *Journal of the American Association for Laboratory Animal Science*, Impact factor 0.950.
- 2012 Member of the Editorial board of the journal ISSN Neuroscience
- 2013-2015 International Behavioural and Neural Genetics Society (IBANGS) Award Committee Member
- 2013-2016 Member-at-large dell'IBANGS Executive Committee
- 2015-2016 Membro del Gruppo di lavoro per i disturbi pervasivi dello sviluppo (DPS), con particolare riferimento ai disturbi dello spettro autistico della Regione Lazio
- 2016 Membro del Tavolo di lavoro su: Disposizioni normative regionali in materia di prevenzione, cura e riabilitazione delle persone affette da disturbi dello spettro autistico della Regione Abruzzo
- 2016 Consulente OMS (Department of Mental Health and Drug of Abuse) per lo sviluppo del Piano Nazionale Autismo del Qatar

Dati personali

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