

DEBORA CUTULI

Curriculum Vitae

Part I – General Information

Full Name	Debora Cutuli
Date of Birth	
Place of Birth	
Citizenship	
Permanent Address	
Mobile Phone Number	
E-mail	
Spoken Languages	Italian, English

Part II – Education

Type	Year	Institution	Notes (Degree, Experience,...)
University graduation	2004	“Sapienza” University of Rome, Italy	Bachelor’s Degree in Psychology (Course in Psychological sciences and techniques for the analysis of cognitive processes; Summa cum Laude).
University graduation	2006	“Sapienza” University of Rome, Italy	Master’s Degree in Psychology (Course in Diagnosis and rehabilitation of cognitive disorders; Summa cum Laude).
PhD	2009	“Sapienza” University of Rome, Italy	Psychobiology and psychopharmacology.
Pre-doctoral training	2008	Fondazione Don Carlo Gnocchi of Rome, Italy	Course in "Methods of investigation in the clinical setting and data processing".
Pre-doctoral training	2008	Istituto Superiore di Sanità and “Sapienza” University of Rome, Italy	Course in “Notions of individual strategy for writing a scientific work international. How, where, when”.
Pre-doctoral training	2008	Association PROMETEO ONLUS, Reggio Calabria, Italy	Training course in "Autism and Asperger syndrome - Operational pathways".
Pre-doctoral training	2009	University of Maastricht, The Netherlands	"Interactive Object Recognition symposium".
Post-doctoral training	2012	Universidade do Minho, Braga, Portugal	FENS-IBRO School in Drugs and the Brain: an update in

			Psychopharmacology from experimental to clinic.
Post-doctoral training	2014	University of Camerino, Italy	Summer School of Nutrigenomics.
Post-graduate studies	2012	“Tor Vergata” University of Rome, Italy	First level Master’s degree in “Autism and pervasive developmental disorders”.
Post-graduate studies	2017	Liquid Plan srl	Training course in "The psychological intervention on eating behavior of celiacs, diabetic and/or heart patients".
Specialty	2018	School of Specialization in Cognitive-Interpersonal Psychotherapy, SCINT, Rome, Italy	Specialization in Cognitive-Interpersonal Psychotherapy.
Pre-graduate training	2003-2006	Istituto Superiore di Sanità, Rome, Italy	Internship at the Section of Behavioral Neuroscience of the Department of Cell Biology and Neuroscience.
Licensure 01	2008	Ordine degli Psicologi del Lazio, Rome, Italy	Permission to practise as a psychologist.
Licensure 02	2011	Cambridge Assessment English	First Certificate Exam: upper intermediate level (B2).

Part III – Appointments

IIIA – Academic Appointments

Start	End	Institution	Position
2006	2009	“Sapienza” University of Rome, Italy	Scholarship to attend the PhD in Psychobiology and Psychopharmacology
2013	2014	Department of Psychology, “Sapienza” University of Rome, Italy	Research fellowship
2018	2019	Faculty of Medicine and Surgery "A. Gemelli", Rome, Italy	Research fellowship

IIIB – Other Appointments

Start	End	Institution	Position
2010	2011	Lab of Experimental and Behavioral Neurophysiology, Santa Lucia Foundation, Rome, Italy	Research fellowship
2011	2012	Lab of Experimental and Behavioral Neurophysiology, Santa Lucia Foundation, Rome, Italy	Post-doc scholarships
2012	2013	Department of Cell Biology and	Post-doc scholarship

		Neuroscience, Istituto Superiore di Sanità, Rome, Italy	
2014	2017	Lab of Experimental and Behavioral Neurophysiology, Santa Lucia Foundation, Rome, Italy	Research fellowship
2017	2018	Lab of Experimental and Behavioral Neurophysiology, Santa Lucia Foundation, Rome, Italy	Research fellowship
2019	2019	Lab of Experimental and Behavioral Neurophysiology, Santa Lucia Foundation, Rome, Italy	Research fellowship
2020	2022	Lab of Experimental and Behavioral Neurophysiology, Santa Lucia Foundation, Rome, Italy	Post-doc scholarship

Part IV – Teaching experience

Year	Institution	Lecture/Course
2011-2012	Faculty of Investigative Sciences, University of L'Aquila, Italy	Course in “Physiological psychology” (6 CFU)
2011-2012	Faculty of Psychology, University of L'Aquila, Italy	Course in “Psychology of emotions” (4 CFU)
2013-2017	Faculty of Psychology, University of L'Aquila, Italy	Course in “Psychobiology of emotions” (6 CFU)
2018-2020	Faculty of Psychology, University of L'Aquila, Italy	Course in “Psychobiology of emotions” (6 CFU)
2013-2017	Faculty of Motor Sciences of the University “Parthenope” of Naples (Professor Laura Mandolesi)	Activity as teaching assistant
2015-2018	Second Center of Cognitive-Interpersonal Therapy, Federpsi, Rome, Italy	Lectures on Mindfulness and Special Educational Needs
2019	“San Raffaele” Telematic University of Rome, Integrated biomechanical master 4.0	Lecture on “Psychology and cognitive disorders”
2019	“San Raffaele” Telematic University of Rome, Integrated biomechanical master 4.0	Lecture on “Sport and psychophysical well-being”

Part V - Society memberships, Awards and Honors

Year	Title
2007	Member of the European Brain and Behaviour Society
2008	Member of the Italian professional organization of Psychologists
2012	Member of the Italian Society for Neuroscience
2012	Member of the Italian Association for Animal Laboratory Sciences

2014-2028	National Academic Qualification as Associate Professor in General Psychology, Psychobiology and Psychometry (11/E1)
2006-2009	“Sapienza” University of Rome scholarship to attend the PhD in Psychobiology and Psychopharmacology
2011	Santa Lucia Foundation Research Institute post-doc scholarship (project title: “Study of the neuroprotective effects of acetylcholinesterase inhibitor drugs in an experimental model of cholinergic depletion”).
2012	Santa Lucia Foundation Research Institute post-doc scholarship (project title: “Behavioral and biochemical analysis of the neuroprotective effects of acetylcholinesterase inhibitor drugs”).
2016-2020	Executive manager of the experimental protocol 682-2016 PR "ENVIRONMENTAL AND DIETETIC NEUROPROTECTIVE EFFECTS ON BEHAVIORAL, BIOCHEMICAL AND NEUROPLASTICITY IN RODENTS" approved by the Ministry of Health
2017-to present	Executive manager of the experiments for the collaboration with the University of Montreal to carry out a research on the healthy aging model of Lou/C rats
2012	SINS Travel grant to attend the Federation of European Neuroscience Society Forum in Barcelona
2017	SINS Travel grant to attend the SINS Congress in Ischia
2015	Review Editor of the Editorial Board of Movement Science and Sport Psychology, part of the journal Frontiers in Psychology.
2015-2017	Guest Editor of the Special Issue "Neuroprotection mechanisms and their potential applications" for Current Neuropharmacology journal (2015-2017; DOI: 10.2174/1570159X15999170208155946).
2017	Guest Editor of the Special Issue "Neuroplasticity and Healthy Lifestyle: How Can We Understand This Relationship?" for Neural Plasticity journal (DOI: 10.1155/2017/9506181). https://www.hindawi.com/journals/np/si/818310/cfp/ .
2019	Associate Editor of the Editorial Board of Aging Psychiatry, specialty section of Frontiers in Psychiatry.
2019	Topic Editor of the Frontiers Research Topic “Environmental Enrichment as a Treatment? Epigenetic Mechanisms, Challenges and Limitations” for Frontiers in Pharmacology.
2020-2022	Santa Lucia Foundation Research Institute post-doc scholarship (project title: “Analyses of effects of long-term oral administration of palmitoylethanolamide on Tg2576 Mice”).

Part VI - Funding Information [grants as PI-principal investigator or I-investigator]

Year	Title	Program	Grant value
2013	“Looking for new insight on Omega-3 fatty acids role on cognitive decline and brain dysfunctions in age-related disorders.”	Starting grant (Avvio alla ricerca) by the Italian Ministry of Education, Universities and Research (Principal Investigator).	3,000 €
2012-2013	Study of the “Maternal care of BTBR T+tf/J mice” at the Istituto Superiore di Sanità, under the	Grant by the Italian Association for Animal Laboratory Sciences (2012;	5,000 €

	supervision of Dr. Gemma Calamandrei.	Principal Investigator).	
2014-2018	“Looking for new insight on Omega-3 fatty acids role on cognitive decline and brain dysfunctions in age-related disorders.”	Young-Researcher Grant of the Italian Ministry of Health (Principal Investigator).	304,109.16 €

Part VII – Research Activities

Keywords

Brain and behavior
Behavioral neuroscience
Environmental enrichment
Successful aging
Brain and cognitive reserve

Brief Description

The research activity of Debora Cutuli has focused on animal behavior, biochemical and neuroanatomical analyses in different experimental models ranging from developmental disorders (such as the induction of neonatal hypoxia and administration of pesticides) to neurodegenerative or surgical lesions of the central nervous system (such as immunotoxic lesions of the basal forebrain cholinergic system or cerebellar damages). The research topic of morphological and functional changes following the cholinergic depletion of basal forebrain have been evaluated in the presence of pharmacological manipulations. The most recent investigations have focused on the cerebellar involvement in cognitive flexibility, spatial functions, and personality as well as the adaptation of cortico-striatal circuits in the presence of cerebellar lesions. She also participated in the analysis of data on the explorative functions of Williams syndrome patients analyzed through a large-scale task with multiple rewards. She contributed to studies correlating personality traits and brain volumes. Recently, she has coordinated a research group aimed at investigating the effects of omega-3 fatty acids on age-related disorders either in mice and in subjects affected by Mild Cognitive Impairment and Alzheimer's Disease at the Santa Lucia Foundation (Rome, Italy). She is involved in studies on the inter-generational effects of environmental enrichment in collaboration with the National Research Council (Rome, Italy), University of Oviedo (Spain) and KAUST (Arabia). Currently, she is carrying out collaborations with the University of Montreal (Canada) to study the longevity mechanisms in a preclinical healthy ageing model and with the University of Malaga (Spain) to study the beneficial effects of brain and cognitive reserve on addiction. Debora Cutuli is author of many papers published in international peer-reviewed journal and several book contributions.

Main competencies: Excellent use of animal models (rat/mouse). Excellent skills in stereotaxic surgery, cannula implantation and good knowledge of histological techniques, immunohistochemistry, and confocal microscopy. Excellent skills in the use of behavioral tests and protocols for rodents (such as Morris Water Maze, Forced Swim test, Open Field test, Radial Arm Maze, Serial Learning test, Social interactions, Sociability, Social Memory test, Object Recognition test, Fear Conditioning, Shuttle Box, Passive and Active Avoidance, Y-maze, Marble Burying test, Ultrasound analysis, Environmental and dietary enrichment). Study of the correlates of psychological functions in humans: psychodiagnostic evaluation; data analysis in structural neuroimaging studies (MRI); psychological counseling and psychotherapy activity. Excellent skills in statistical

Part VIII – Summary of Scientific Achievements

Total Citations	1051
Hirsch (H) index	21

Part IX – List of publications

Publications in international indexed and peer-reviewed journals

- Cutuli D**, Landolfo E, Decandia D, Nobili A, Viscomi MT, La Barbera L, Sacchetti S, De Bartolo P, Curci A, D'Amelio M, Farioli-Vecchioli S, Petrosini L. Neuroprotective Role of Dietary Supplementation with Omega-3 Fatty Acids in the Presence of Basal Forebrain Cholinergic Neurons Degeneration in Aged Mice. *Int J Mol Sci.* 2020 Mar 4;21(5):1741. doi: 10.3390/ijms21051741. [IF:4.183]
- Cutuli D**, Ladrón de Guevara-Miranda D, Castilla-Ortega E, Santín LJ, Sampedro-Piquero P. Highlighting the role of cognitive and brain reserve in the substance use disorder field. *Curr Neuropharmacol.* 2019. doi: 10.2174/1570159X17666190617100707. [IF: 4.568]
- Cutuli D**, Berretta E, Laricchiuta D, Caporali P, Gelfo F, Petrosini L. Pre-reproductive parental positive experiences influence progeny's developmental trajectories. *Frontiers in Behavioral Neuroscience.* 2018;12:254. [IF: 2.622]
- Picerni E, Santarcangelo EL, Laricchiuta D, **Cutuli D**, Petrosini L, Spalletta G, Piras F. Cerebellar Structural Variations in Subjects with Different Hypnotizability. *Cerebellum.* 2018. [IF: 3.413]
- Cutuli D**, Berretta E, Caporali P, Sampedro-Piquero P, De Bartolo P, Laricchiuta D, Gelfo F, Pesoli M, Foti F, Farioli Vecchioli S, Petrosini L. Effects of pre-reproductive maternal enrichment on maternal care, offspring's play behavior and oxytocinergic neurons. *Neuropharmacology.* 2018. pii:S0028-3908(18)30072-8. [IF: 4.367]
- Begega A, Santín LJ, Galeano P, **Cutuli D**, Sampedro-Piquero P. Neuroplasticity and Healthy Lifestyle: How Can We Understand This Relationship? *Neural Plast.* 2017;2017:9506181. [IF: 3.161]
- Farioli-Vecchioli S, Sacchetti S, di Robilant NV, **Cutuli D**. The Role of Physical Exercise and Omega-3 Fatty Acids in Depressive Illness in the Elderly. *Curr Neuropharmacol.* 2018;16(3):308-326. [IF: 4.568]
- Cutuli D**, Berretta E, Pasqualini G, De Bartolo P, Caporali P, Laricchiuta D, Sampedro-Piquero P, Gelfo F, Pesoli M, Foti F, Begega A, Petrosini L. Influence of Pre-reproductive Maternal Enrichment on Coping Response to Stress and Expression of c-Fos and Glucocorticoid Receptors in Adolescent Offspring. *Front Behav Neurosci.* 2017;11:73. [IF: 3.138]
- Cutuli D**. EDITORIAL: Neuroprotection Mechanisms and their Potential Applications. *Curr Neuropharmacol.* 2017;15(4):458. [IF: 4.068]

10. Nobili A, Latagliata EC, Viscomi MT, Cavallucci V, **Cutuli D**, Giacobuzzo G, Krashia P, Rizzo FR, Marino R, Federici M, De Bartolo P, Aversa D, Dell'Acqua MC, Cordella A, Sancandi M, Keller F, Petrosini L, Puglisi-Allegra S, Mercuri NB, Coccurello R, Berretta N, D'Amelio M. Dopamine neuronal loss contributes to memory and reward dysfunction in a model of Alzheimer's disease. *Nat Commun.* 2017;8:14727. [IF: 12.353]
11. Gelfo F, **Cutuli D**, Nobili A, De Bartolo P, D'Amelio M, Petrosini L, Caltagirone C. Chronic Lithium Treatment in a Rat Model of Basal Forebrain Cholinergic Depletion: Effects on Memory Impairment and Neurodegeneration. *J Alzheimers Dis.* 2017;56(4):1505-1518. doi: 10.3233/JAD-160892. [IF: 3.476]
12. **Cutuli D**. Functional and Structural Benefits Induced by Omega-3 Polyunsaturated Fatty Acids During Aging. *Curr Neuropharmacol.* 2017;15(4):534-542. [IF: 4.068]
13. Petrosini L, **Cutuli D**, Picerni E, Laricchiuta D. Viewing the Personality Traits Through a Cerebellar Lens: a Focus on the Constructs of Novelty Seeking, Harm Avoidance, and Alexithymia. *Cerebellum.* 2017;16(1):178-190. [IF: 3.199]
14. **Cutuli D**, Pagani M, Caporali P, Galbusera A, Laricchiuta D, Foti F, Neri C, Spalletta G, Caltagirone C, Petrosini L, Gozzi A. Effects of Omega-3 Fatty Acid Supplementation on Cognitive Functions and Neural Substrates: A Voxel-Based Morphometry Study in Aged Mice. *Front Aging Neurosci.* 2016;8:38. [IF: 4.504]
15. Petrosini L, De Bartolo P, **Cutuli D***, Gelfo* F. Perinatal 192 IgG-Saporin as Neuroteratogen. *Curr Top Behav Neurosci.* 2016;29:111-23. [IF: 0]
16. Laricchiuta D, Cavallucci V, **Cutuli D**, De Bartolo P, Caporali P, Foti F, Finke C, D'Amelio M, Manto M, Petrosini L. Effects of Anti-NMDA Antibodies on Functional Recovery and Synaptic Rearrangement Following Hemicerebellectomy. *Neuromolecular Medicine* 2016;18:190-202 [IF: 3.287]
17. Caporali P*, **Cutuli D***, Gelfo F, Laricchiuta D, Foti F, De Bartolo P, Angelucci F, Petrosini L. Interaction does Count: A Cross-Fostering Study on Transgenerational Effects of Pre-reproductive Maternal Enrichment. *Front Behav Neurosci.* 2015;9:320. [IF 3.392]
18. **Cutuli D**, Caporali P, Gelfo F, Angelucci F, Laricchiuta D, Foti F, De Bartolo P, Bisicchia E, Molinari M, Farioli Vecchioli S, Petrosini L. Pre-reproductive maternal enrichment influences rat maternal care and offspring developmental trajectories: behavioral performances and neuroplasticity correlates. *Front Behav Neurosci.* 2015;9:66. [IF 3.392]
19. Petrosini L, **Cutuli D**, Picerni E, Laricchiuta D. Cerebellum and personality traits. *Cerebellum.* 2015;14(1):43-6. [IF: 2.429]
20. Laricchiuta D, Petrosini L, Picerni E, **Cutuli D**, Iorio M, Chiapponi C, Caltagirone C, Piras F, Spalletta G. The embodied emotion in cerebellum: a neuroimaging study of alexithymia. *Brain Struct Funct.* 2015;220(4):2275-87. [IF: 5.811]
21. **Cutuli D**. Cognitive reappraisal and expressive suppression strategies role in the emotion regulation: an overview on their modulatory effects and neural correlates. *Front Syst Neurosci.* 2014;8:175. [IF: 0]

- 22. Cutuli D**, De Bartolo P, Caporali P, Laricchiuta D, Foti F, Ronci M, Rossi C, Neri C, Spalletta G, Caltagirone C, Farioli-Vecchioli S, Petrosini L. n-3 polyunsaturated fatty acids supplementation enhances hippocampal functionality in aged mice. *Front Aging Neurosci.* 2014;6:220. [IF 4.000]
- 23.** Laricchiuta D, Petrosini L, Piras F, **Cutuli D**, Macci E, Picerni E, Chiapponi C, Caltagirone C, Spalletta G. Linking novelty seeking and harm avoidance personality traits to basal ganglia: volumetry and mean diffusivity. *Brain Struct Funct.* 2014;219(3):793-803. [IF: 5.618]
- 24.** Laricchiuta D, Petrosini L, Piras F, Macci E, **Cutuli D**, Chiapponi C, Cerasa A, Picerni E, Caltagirone C, Girardi P, Tamorri SM, Spalletta G. Linking novelty seeking and harm avoidance personality traits to cerebellar volumes. *Hum Brain Mapp.* 2014;35(1):285-96. [IF: 5.969]
- 25.** Caporali P, **Cutuli D**, Gelfo F, Laricchiuta D, Foti F, De Bartolo P, Mancini L, Angelucci F, Petrosini F. Pre-reproductive maternal enrichment influences offspring developmental trajectories: motor behavior and neurotrophin expression. *Front Behav Neurosci.* 2014;8-195. [IF: 3.270]
- 26.** Hampe CS, Petrosini L, De Bartolo P, Caporali P, **Cutuli D**, Laricchiuta D, Foti F, Radtke JR, Vidova V, Honnorat J, Manto M. Monoclonal antibodies to 65kDa glutamate decarboxylase induce epitope specific effects on motor and cognitive functions in rats. *Orphanet Journal of Rare Diseases* 2013;8:82. [IF: 3.950]
- 27. Cutuli D**, De Bartolo P, Caporali P, Tartaglione AM, Oddi D, D'Amato FR, Nobili A, D'Amelio M, Petrosini L. Neuroprotective effects of donepezil against cholinergic depletion. *Alzheimers Res Ther.* 2013;5(5):50. [IF: 3.500]
- 28.** Picerni E, Petrosini L, Piras F, Laricchiuta D, **Cutuli D**, Chiapponi C, Fagioli S, Girardi P, Caltagirone C, Spalletta G. New evidence for the cerebellar involvement in personality traits. *Front Behav Neurosci.* 2013;7:133. [IF 4.160]
- 29.** Bossù P, **Cutuli D**, Palladino I, Caporali P, Angelucci F, Laricchiuta D, Gelfo F, De Bartolo P, Caltagirone C, Petrosini L. A single intraperitoneal injection of endotoxin in rats induces long-lasting modifications in behavior and brain protein levels of TNF- α and IL-18. *J Neuroinflammation.* 2012;9:101. [IF: 4.351]
- 30.** Laricchiuta D, Rossi S, Musella A, De Chiara V, **Cutuli D**, Centonze D, Petrosini L. Differences in spontaneously avoiding or approaching mice reflect differences in CB1-mediated signaling of dorsal striatal transmission. *PLoS One.* 2012;7(3):e33260. [IF: 3.730]
- 31.** Foti F, Petrosini L, **Cutuli D**, Menghini D, Chiarotti F, Vicari S, Mandolesi L. Explorative function in Williams syndrome analyzed through a large-scale task with multiple rewards. *Res Dev Disabil.* 2011;32:972-985. [IF: 3.405]
- 32. Cutuli D**, Rossi S, Burello L, Laricchiuta D, De Chiara V, Foti F, De Bartolo P, Musella A, Gelfo F, Centonze D, Petrosini L. Before or after does it matter? Different protocols of environmental enrichment differently influence motor, synaptic and structural deficits of cerebellar origin. *Neurobiol Dis.* 2011;42:9-20. [IF: 5.403]
- 33.** Foti F, Laricchiuta D, **Cutuli D**, De Bartolo P, Gelfo F, Angelucci F, Petrosini L. Exposure to an Enriched Environment Accelerates Recovery from Cerebellar Lesion. *Cerebellum* 2011;10:104-119. [IF: 3.207]

34. Gelfo F, **Cutuli D**, Foti F, Laricchiuta D, De Bartolo P, Caltagirone C, Petrosini L. Enriched environment improves motor function and increases neurotrophins in hemicerebellar lesioned rats. *Neurorehabil Neural Repair*. 2011;25:243-252. [IF: 4.495]
35. 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;20:207-227. [IF: 4.261]
36. Foti F, Mandolesi L, **Cutuli D**, Laricchiuta D, De Bartolo P, Gelfo F, Petrosini L. Cerebellar damage loosens the strategic use of the spatial structure of the search space. *Cerebellum* 2010;9:29-41. [IF: 3.288]
37. Mandolesi L, Foti F, **Cutuli D**, Laricchiuta D, Gelfo F, De Bartolo P, Petrosini L. Features of sequential learning in hemicerebellectomized rats. *J Neurosci Res* 2010;88:478-486. [IF: 2.958]
38. Angelucci F, De Bartolo P, Gelfo F, Foti F, **Cutuli D**, Bossù P, Caltagirone C, Petrosini L. Increased concentrations of nerve growth factor and brain-derived neurotrophic factor in the rat cerebellum after exposure to environmental enrichment. *Cerebellum* 2009;8:499-506. [IF: 3.280]
39. Petrosini L, De Bartolo P, Foti F, Gelfo F, **Cutuli D**, Leggio MG, Mandolesi L. On whether the environmental enrichment may provide cognitive and brain reserves. *Brain Research Reviews* 2009;61:221-239. [IF: 7.390]
40. De Bartolo P, Gelfo F, Mandolesi L, Foti F, **Cutuli D**, Petrosini L. Effects of chronic donepezil treatment and cholinergic deafferentation on parietal pyramidal neuron morphology. *J Alzheimers Dis* 2009;17:177-191. [IF: 3.832]
41. De Bartolo P, Mandolesi L, Federico F, Foti F, **Cutuli D**, Gelfo F, Petrosini L. Cerebellar involvement in cognitive flexibility. *Neurobiology of Learning and Memory* 2009;92:310-317. [IF: 3.479]
42. **Cutuli D**, Foti F, Mandolesi L, De Bartolo P, Gelfo F, Federico F, Petrosini L. Cognitive performances of cholinergically depleted rats following chronic donepezil administration. *J Alzheimers Dis* 2009;17:161-176. [IF: 3.832]
43. **Cutuli D**, Foti F, Mandolesi L, De Bartolo P, Gelfo F, Federico F, Petrosini L. Cognitive performance of healthy young rats following chronic donepezil administration. *Psychopharmacology (Berl)* 2008;197:661-673. [IF: 3.676]
44. Venerosi A, **Cutuli D**, Colonnello V, Cardona D, Ricceri L, Calamandrei G. Neonatal exposure to chlorpyrifos affects maternal responses and maternal aggression of female mice in adulthood. *Neurotoxicol Teratol*. 2008 Nov-Dec;30(6):468-74. [IF: 2.740]
45. 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. [IF: 2.626]
46. Venerosi A, **Cutuli D**, Chiarotti F, Calamandrei G. C-section birth per se or followed by acute global asphyxia altered emotional behaviour in neonate and adult rats. *Behav Brain Res*. 2006 Mar 15;168(1):56-63. [IF: 2.591]

International and national book chapters

1. Petrosini L, **Cutuli D**, Picerni E, Laricchiuta D. "Personality is reflected in brain morphometry", in the Handbook VBM and personality, by Piras F and Spalletta G. Springer (2018).
2. Farioli-Vecchioli S and **Cutuli D**. "Functional role of physical exercise and omega-3 fatty acids on depression and mood disorders" by, in the volume "Neurobiological and Psychological Aspects of Brain Recovery", by Petrosini L, Springer (2017).
3. Petrosini L, De Bartolo P, **Cutuli D***, Gelfo F*. "Perinatal IgG Saporin as Neuroteratogen". Curr Topics Behav Neurosci (2016).
4. Petrosini L, **Cutuli D**, De Bartolo P, Laricchiuta D. "The creative cerebellum: insight from animal and human studies", in the Handbook of Animal Creativity, by Kaufman A (2015).
5. Petrosini L, De Bartolo P, **Cutuli D**. "Neurotoxic Effects, Mechanisms and Outcome of IgG-Saporin", in the Handbook of Neurotoxicity by Kostrzewa RM (2014).
6. Petrosini L, **Cutuli D**, De Bartolo P. "Environmental Influences on Development of the Nervous System", in the volume "Biological Psychology and Neuroscience" of the Handbook of Psychology by Nelson R.J. and Mizumori S.J.Y. (2012);
7. **Cutuli D**, Foti F, Mandolesi L, De Bartolo P, Gelfo F, Laricchiuta D, Petrosini L. "Cognitive performances of cholinergically depleted rats following chronic donepezil administration", in The Journal of Alzheimer's Disease Handbook, by Casadesus G, IOS Press, Amsterdam, The Netherlands (2011);
8. **Cutuli D**, Gelfo F, Petrosini L. "Effetti del trattamento farmacologico in modelli sperimentali di deplezione colinergica", in the volume "LA MALATTIA DI ALZHEIMER: HIGHLIGHTS CLINICI E SPERIMENTALI", Critical Medical Publishing edizioni, Rome, Italy (2010).

* Equal contribution.

Part X- Oral presentations, posters, and organization of symposia

Invited oral presentations

- "Pharmacological and nutraceutical modulation of cholinergic depletion" at the SINS National Congress, September 27, 2019, Perugia, Italy.
- "Looking for new insight on the role of Omega-3 polyunsaturated fatty acids (n-3 PUFA) on cognitive decline and brain dysfunction in age-related disorders" at the 2nd International Conference on Food Bioactives and Health, September 27, 2018, University of Lisbon, Portugal.
- "Mindfulness and empathy: neurobiology of awareness" at the Conference "Mindfulness and relationships: theory, clinical practice and relationships" (4 ECM), October 16, 2015, Rome, Italy.
- "Cerebellum and personality" at the Congress "Trent'anni del Dipartimento di Psicologia (1983-2013) attraverso i suoi contributi di ricerca: un incontro di saperi ed esperienze", December 19, 2013, "Sapienza" University of Rome, Italy.

- "ALTERED MATERNAL STYLE IN THE BTBR T+tf/J MOUSE, A MURINE MODEL OF AUTISM" at the National Congress of the Italian Association for Animal Laboratory Sciences, October 18, 2013, Imola, Italy.

- "Cognitive Reserves and Aging" in the Symposium "Physical activity and aging" at the VI National Conference on the Psychology of Aging, May 27, 2013, Orvieto, Italy.

- "Analysis of fear conditioning during development in the rat: effects of neonatal cholinergic lesions" at the Department of Cell Biology and Neuroscience of the Istituto Superiore di Sanità, October 10, 2005, Rome, Italy.

- "Neurobehavioral effects of perinatal hypoxia in the newborn and adolescent rat" at the Department of Cell Biology and Neuroscience of the Istituto Superiore di Sanità, April 5, 2004, Rome, Italy.

Selection of posters presented at national and international congresses

1. "Altered behaviour patterns in neonate and adolescent rats following C-section birth with or without acute global asphyxia", 2004, Aix-en-Provence, International Society for Developmental Psychobiology (Venerosi A, **Cutuli D**, Calamandrei G);

2. "Effects of neonatal cholinergic lesions on fear conditioning in 18-day-old-rats", 2005, Washington, Society for Neuroscience (Ricceri L, Scattoni ML, **Cutuli D**, Calamandrei G);

3. "Alterations of emotional and social responses following C-section birth per se or plus acute global asphyxia: obstetric complication as risk factor for schizophrenia?", 2005, Ischia, Società Italiana di NeuroScienze, SINS (Venerosi A, **Cutuli D**, Alleva E, Chiarotti F, Calamandrei G), *awarded as best poster*;

4. "Effects of neonatal 192 IgG saporin cholinergic lesions on ultrasound vocalization and fear conditioning responses in preweaning rats", 2005, Ischia, Società Italiana di NeuroScienze, SINS (Ricceri L, Scattoni ML, **Cutuli D**, Venerosi A, Calamandrei G);

5. "Developmental exposure to subtoxic doses of the organophosphorus pesticide Chlorpyrifos affects sex-dimorphic behaviours in mice", 2006, Valencia, International Conference on Food Contaminants and neurodevelopmental Disorders (Venerosi A, **Cutuli D**, Colonnello V, Ricceri L, Calamandrei G);

6. "Do spatial constraints influence search behaviour in the presence of cerebellar lesions?", 2007, Trieste, European Brain and Behaviour Society Meeting (Foti F, **Cutuli D**, Mandolesi L, De Bartolo P, Petrosini L);

7. "Chronic donepezil treatment affects cognitive performances of rats with forebrain cholinergic lesions", 2008, Geneva, Federation of European Neuroscience Societies Forum (**Cutuli D**, Foti F, Mandolesi L, De Bartolo P, Gelfo F, Petrosini L);

8. "Parietal pyramidal neuron morphology and spatial cognition following neonatal or adult basal forebrain cholinergic lesions", 2008, Geneva, Federation of European Neuroscience Societies Forum, FENS (De Bartolo P, Gelfo F, Foti F, **Cutuli D**, Mandolesi L, Ricceri L, Calamandrei G, Petrosini L);

9. “Effect of environmental enrichment on neurotrophins in the rat brain. Possible implications for Alzheimer’s disease”, Italian Interdisciplinary Network on Alzheimer Disease Annual Meeting XII ITINAD 2008 (Angelucci F, Bossù P, Caltagirone C, De Bartolo P, Gelfo F, Foti F, **Cutuli D**, Petrosini L);
10. “IL-18 is differently regulated in specific areas of rat brain during neuroinflammation: relevance for neurodegenerative disease”, Italian Interdisciplinary Network on Alzheimer Disease Annual Meeting ITINAD 2008 (Palladino I, Angelucci F, De Bartolo P, Gelfo F, **Cutuli D**, Foti F, Caltagirone C, Petrosini L, Bossù P);
11. “Does age matter? A behavioral and neuroanatomical study on a selective basal forebrain cholinergic lesion in neonatal and adult rats”, 2009, Rome, European Behavioural Pharmacology Society Meeting (**Cutuli D**, Laricchiuta D, Ricceri L, Foti F, De Bartolo P, Gelfo F, Calamandrei G, Petrosini L);
12. “Effects of environmental enrichment in a rat model of cerebellar lesion”, 2009, Rome, European Behavioural Pharmacology Society Meeting (Gelfo F, De Bartolo P, Foti F, **Cutuli D**, Laricchiuta D, Angelucci F, Petrosini L);
13. “Behavioral and morphological effects of neonatal and adult 192 IgG-Saporin intracerebroventricular injections in rats”, 2009, Rhodes, European Brain and Behaviour Society Meeting (**Cutuli D**, Ricceri L, Foti F, Laricchiuta D, De Bartolo P, Gelfo F, Calamandrei G, Petrosini L);
14. “Environmental enrichment provides a cognitive reserve to be spent following cerebellar lesion”, 2009, Rhodes, European Brain and Behaviour Society Meeting (Foti F, **Cutuli D**, Laricchiuta D, Gelfo F, De Bartolo P, Angelucci F, Petrosini L);
15. “Cognitive and neurochemical effects of lipopolysaccharide-induced neuroinflammation”, 2009, Rhodes, European Brain and Behaviour Society Meeting (Laricchiuta D, Foti F, **Cutuli D**, Angelucci F, Bossù P, Petrosini L);
16. “Environmental enrichment affects motor, synaptic and morphological deficits after cerebellar lesion in rats”, 2010, Amsterdam, Federation of European Neuroscience Societies Forum (De Bartolo P, Rossi S, Foti F, Gelfo F, Burello L, **Cutuli D**, Laricchiuta D, Granato A, Centonze D, Petrosini L);
17. “Avoidance and approach behaviors reflect endocannabinoid transmission in dorsal striatum”, 2011, Rome, “The Emotional Brain” Congress (Laricchiuta D, Rossi S, Musella A, De Chiara V, **Cutuli D**, Angelucci F, Gelfo F, Centonze D, Petrosini L);
18. “Neuroprotective effects of Donepezil in 192-IgG-saporin lesioned rats”, 2012, Barcelona, Federation of European Neuroscience Societies Forum (**Cutuli D**, De Bartolo P, Caporali P, Petrosini L);
19. “Early environmental enrichment exposure of female rats influences motor development in the offspring”, 2012, Barcelona, Federation of European Neuroscience Societies Forum (Caporali P, **Cutuli D**, Laricchiuta D, Foti F, Gelfo F, De Bartolo P, Angelucci F, Petrosini L);

20. "Neuroprotective effects of Donepezil in cholinergically depleted rats", 2012, Braga, Portugal (**Cutuli D**, De Bartolo P, Caporali P, Petrosini L);
21. "Early environmental enrichment exposure of female rats influences maternal behavior and offspring behavioral performances", 2013, Munich, Germany, European Brain and Behaviour Society Meeting (**Cutuli D**, Caporali P, Laricchiuta D, Foti F, De Bartolo P, Petrosini L);
22. "Sociability and social memory in adolescent and adult rats", 2013, Munich, Germany, European Brain and Behaviour Society Meeting (Caporali P, **Cutuli D**, Petrosini L);
23. "n-3 polyunsaturated fatty acids supplementation restores hippocampal-dependent memory and neurogenesis in aged mice", 2013, Rome, Italy, SINS Congress (**Cutuli D**, De Bartolo P, Farioli Vecchioli S, Caporali P, Laricchiuta D, Foti F, Petrosini L).
24. "Altered maternal style in BTBR T+tf/J, a murine model of autism", 2013, Rome, Italy, SINS Congress (Giorgi MC, De Felice A, **Cutuli D**, Calamandrei G).
25. Abstract AISAL Symposium on Animal Pain Recognition and Management in Biomedical and Veterinary Research, Imola, Italy, 2013, "Maternal Care Alteration in the BTBR T+tf/J Mouse, a Murine Model of Autism" (**Cutuli D**, Giorgi MC, De Felice A, Calamandrei G).
26. "Transgenerational effects of maternal pre-reproductive environmental enrichment on isolation stress response of offspring: glucocorticoids receptors expression in hippocampus and amygdala". EBBS-EBPS Joint Meeting, Verona, Italy, 2015 (Berretta E, Pasqualini G, De Bartolo P, Laricchiuta D, **Cutuli D**, Foti F, Gelfo F, Caporali P, Petrosini L).
27. "Altered maternal style in a mouse model of idiopathic autism: a role for oxytocin?" Cagliari, Italy, 2015, Congresso SINS (Giorgi MC, De Felice A, **Cutuli D**, Farioli Vecchioli S, Calamandrei G).
28. "Transgenerational modulation of the response to chronic stress in adolescent rats." Copenhagen, Denmark, 2016, FENS Forum (Berretta E, Pasqualini G, Pesoli M, De Bartolo P, **Cutuli D**, Caporali P, Laricchiuta D, Foti F, Gelfo F, Petrosini L).
29. " Effects of omega-3 fatty acid supplementation on cognitive functions and neural substrates: a voxel-based morphometry study in aged mice", Copenhagen, Denmark, 2016, FENS Forum (Pesoli M, **Cutuli D**, Pagani M, Caporali P, Galbusera A, Laricchiuta D, Foti F, Neri C, Spalletta G, Caltagirone C, Petrosini L, Gozzi A).
30. "Plasma n-3 PUFA levels levels correlates with protein markers in age-related disorders: an observational study in Alzheimer's disease and MCI", Lecce, Italy, 2017, ItPA (Ronci M, **Cutuli D**, Piras F, Marini F, Pieroni L, Greco V, Petrosini L, Spalletta G, Urbani A).
31. "Behavioral and biochemical benefits induced by omega-3 polyunsaturated fatty acid (n-3 PUFA) supplementation in cholinergically depleted aged mice", Ischia, Italy, 2017, SINS Congress (**Cutuli D**, De Bartolo P, Sacchetti S, Landolfo E, Laricchiuta D, Nobili A, D'Amelio M, Foti F, Farioli Vecchioli S, Petrosini L).

Organization of symposia

1. Accepted symposium "Affective neuroscience for psychosomatics" at the International College of Psychosomatic Medicine, 25th World Congress, September 11-13, 2019, Florence, Italy; *Chairs*: Grassi L, Farinelli M; *Speakers*: Colonnello V, **Cutuli D**, Romaniello C, Leonardi G.
2. Accepted symposium "Implication of cholinergic transmission in physiology and pathology" at the SINS National Congress, 26-29 September 2019, Perugia, Italy; *Chairs*: Tata A, Tassone A; *Speakers*: Tassone A, **Cutuli D**, Piras F, Piovesana R.

Part XI- Participation in research projects as Member of the research group

- PRIN 2007 project: "An analysis of cognitive performance, structural modifications and changes in neurotrophic factors in the presence of cholinergic lesions of the basal forebrain".
- "Ateneo Federato" project, "Sapienza" 2007: "An experimental model for the study of cognitive and behavioral deficits following cholinergic depletion of the basal forebrain".
- "Sapienza" University research project 2007: "Cholinergic hypothesis of Alzheimer's disease: behavioral, structural and biochemical modifications in experimental and clinical models"
- "Ateneo Federato" project, "Sapienza" 2008: "Cognitive deficits in a model of cholinergic depletion of the basal forebrain".
- "Sapienza" University project 2012: "Typical and atypical development in spatial and temporal cognition".

Rome, 10/07/2020

Signature



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