CURRICULUM VITAE

NAME	**POSITION TITLE**
Cassano, Tommaso	Full Professor of Pharmacology

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)*

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Bari (Italy)	Pharm. D.	1999	Medicinal Chemistry
University of Bari (Italy)	Ph. D.	2003	Pharmacology
University of Foggia (Italy)	M. D.	2020	Medicine and Surgery

A. Positions and Honors.

Positions:

2000-2003: “Research Fellow”, Dept. of Cognitive and Molecular Neuroscience, Babraham Institute, Cambridge, U.K
2003 : “Postdoctoral Researcher”, Dept. of Neurobiology and Behaviour, Univ. of California, Irvine, USA
2004 : “Visiting Researcher”, Dept. of Psychiatry and Human Behaviour, College of Medicine, Univ. of California, Irvine, USA
2002-2015: Assistant Professor of Pharmacology, Dept. of Biomedical Sciences, School of Medicine, Univ. of Foggia
2015-2024: Associate Professor of Pharmacology, Dept. of Dept. of Medical and Surgical Sciences, Univ. of Foggia
2024- present: Full Professor of Pharmacology, Dept. of Dept. of Medical and Surgical Sciences, Univ. of Foggia
2005-present: Member of the Board of Professors of the Ph.D program at University di Foggia.

Awards:

2000: Short-Term Fellowship for Specialised Studies Abroad, Italian Society of Pharmacology
2002: Long-Term Fellowship for Specialised Studies Abroad, Italian Society of Pharmacology 2002: Servier Young Investigator Award, Servier International
2008-2024: ERASMUS Fellowship, Univ. of Foggia
2011: “Visiting Professorship” at “Département des Actions Internationales du Collège Doctoral, Pôle de Recherche et d’Enseignement Supérieur, Univ. Lille Nord de France”
2012: “Gianluca Montel” for research activity, University of Foggia.

Other Experience and Professional Membership

Invited Lectures:

2023: “Behavioural and neurochemical alterations in a triple transgenic model of Alzheimer's disease”, Rzeszow International Medical Student AssociationCongress”, Rzeszow (Poland) 26 – 28 May 2023.
2019: “Chronic inhibition of fatty acid amide hydrolase ameliorates the Alzheimer-like phenotype in 3Å~Tg-AD mice”, 39 Congresso Nazionale della Societ. Italiana di Farmacologia”, Firenze 20 – 23 Novembre 2019
2017: “The ugly the bad and the good": how oleoylethanolamide can ameliorate neurochemical and behavioral aspects of eating disorders” 38Åã Congresso Nazionale della Societ. Italiana di Farmacologia”, Rimini 25 – 28 ottobre 2017
2011: Visiting Professorship presso “D.partement des Actions Internationales du 6 Coll.ge Doctoral, P.le de Recherche et d’Enseignement Sup.rieur, Universit. Lille Nord de France”
2009: “Behavioural and neurochemical alterations in a triple transgenic model of Alzheimer’s disease” Unité de Glycobiologie Structurale et Fonctionnelle – Neuroplasticité, Université Lille Nord de France, FRANCE
2009: “Evaluation of the emotional phenotype and serotonergic neurotransmission of fatty acid amide hydrolase-deficient mice”, School of Psychology, Cardiff University, UK
2003: “Olfactory memory in mice expressing a mutated human APP transgene” Department of Neurobiology and Behavior, University of California Irvine, USA

Coordinator of the Socrates-Erasmus programs, School of Medicine, University of Foggia
Referee for “peer reviewed” Journal of Neurochemistry, PLOSone, Neurochemistry International, Neural Regeneration Research, Behavioural Brain Research, Psychoneuroendocrinology, European Journal of Neurology
Membership: Society for Neuroscience, Italian Society of Pharmacology, Italian Society of Neuropsychopharmacology.

B. Selected peer-reviewed publications (in chronological order)

1. Lanzillotta C, Prestia F, Greco V, Iavarone F, Cordella F, Sette C, Forte E, Tramutola A, Lanzillotta S, Cassano T, Di Angelantonio S, Urbani A, Barone E, Perluigi M, Di Domenico F. Enhancing protein O-GlcNAcylation in down syndrome mice mitigates memory dysfunctions through the rescue of mitochondrial bioenergetics, stress responses and pathological markers. Redox Biol. 2025 Sep;85:103769. doi: 10.1016/j.redox.2025.103769. Epub 2025 Jul 16. PMID: 40684658; PMCID: PMC12301976.

2. Altamura M, Leccisotti I, Moretti MC, Bellomo A, Panza F, Cassano T, Lozupone M. Corrigendum to "Can ketamine therapy overcome treatment-resistant depression in Alzheimer's disease and older adults? Preclinical and clinical evidence" [Biomed. Pharmacother. 188 (2025) 118199]. Biomed Pharmacother. 2025 Aug;189:118232. doi: 10.1016/j.biopha.2025.118232. Epub 2025 Jun 13. Erratum for: Biomed Pharmacother. 2025 Jul;188:118199. doi: 10.1016/j.biopha.2025.118199. PMID: 40514286.

3. Kanwal H, Sangineto M, Ciarnelli M, Castaldo P, Villani R, Romano AD, Serviddio G, Cassano T. Potential Therapeutic Targets to Modulate the Endocannabinoid System in Alzheimer's Disease. Int J Mol Sci. 2024 Apr 5;25(7):4050. doi: 10.3390/ijms25074050. PMID: 38612861; PMCID: PMC11012768.

4. Beggiato S, Ferrara F, Romani A, Cassano T, Trentini A, Valacchi G, Cervellati C, Ferraro L. Signature of paraoxonases in the altered redox homeostasis in Alzheimer's disease. Chem Biol Interact. 2024 Jan 25;388:110839. doi: 10.1016/j.cbi.2023.110839. Epub 2023 Dec 22. PMID: 38142921.

5. Sangineto M, Ciarnelli M, Cassano T, Radesco A, Moola A, Bukke VN, Romano A, Villani R, Kanwal H, Capitanio N, Duda L, Avolio C, Serviddio G. Metabolic reprogramming in inflammatory microglia indicates a potential way of targeting inflammation in Alzheimer's disease. Redox Biol. 2023 Oct;66:102846. doi: 10.1016/j.redox.2023.102846. Epub 2023 Aug 9. PMID: 37586250; PMCID: PMC10457454.

6. Cassano T, Giamogante F, Calcagnini S, Romano A, Lavecchia AM, Inglese F, Paglia G, Bukke VN, Romano AD, Friuli M, Altieri F, Gaetani S. PDIA3 Expression Is Altered in the Limbic Brain Regions of Triple-Transgenic Mouse Model of Alzheimer's Disease. Int J Mol Sci. 2023 Feb 3;24(3):3005. doi: 10.3390/ijms24033005. PMID: 36769334; PMCID: PMC9918299.

7. Bellanti F, Bukke VN, Moola A, Villani R, Scuderi C, Steardo L, Palombelli G, Canese R, Beggiato S, Altamura M, Vendemiale G, Serviddio G, Cassano T. Effects of Ultramicronized Palmitoylethanolamide on Mitochondrial Bioenergetics, Cerebral Metabolism, and Glutamatergic Transmission: An Integrated Approach in a Triple Transgenic Mouse Model of Alzheimer's Disease. Front Aging Neurosci. 2022 May 24;14:890855. doi: 10.3389/fnagi.2022.890855. PMID: 35686025; PMCID: PMC9170916.

8. Bukke VN, Villani R, Archana M, Wawrzyniak A, Balawender K, Orkisz S, Ferraro L, Serviddio G, Cassano T. The Glucose Metabolic Pathway as A Potential Target for Therapeutics: Crucial Role of Glycosylation in Alzheimer's Disease. Int J Mol Sci. 2020 Oct 19;21(20):7739. doi: 10.3390/ijms21207739. PMID: 33086751; PMCID: PMC7589651.

9. Bukke VN, Archana M, Villani R, Romano AD, Wawrzyniak A, Balawender K, Orkisz S, Beggiato S, Serviddio G, Cassano T. The Dual Role of Glutamatergic Neurotransmission in Alzheimer's Disease: From Pathophysiology to Pharmacotherapy. Int J Mol Sci. 2020 Oct 9;21(20):7452. doi: 10.3390/ijms21207452. PMID: 33050345; PMCID: PMC7589203.

10. Carapelle E, Mundi C, Cassano T, Avolio C. Interaction between Cognitive Reserve and Biomarkers in Alzheimer Disease. Int J Mol Sci. 2020 Aug 30;21(17):6279. doi: 10.3390/ijms21176279. PMID: 32872643; PMCID: PMC7503751.

11. Beggiato S, Cassano T, Ferraro L, Tomasini MC. Astrocytic palmitoylethanolamide pre-exposure exerts neuroprotective effects in astrocyte- neuron co-cultures from a triple transgenic mouse model of Alzheimer's disease. Life Sci. 2020 Sep 15;257:118037. doi: 10.1016/j.lfs.2020.118037. Epub 2020 Jul 2. PMID: 32622942.

12. Cassano T, Villani R, Pace L, Carbone A, Bukke VN, Orkisz S, Avolio C, Serviddio G. From Cannabis sativa to Cannabidiol: Promising Therapeutic Candidate for the Treatment of Neurodegenerative Diseases. Front Pharmacol. 2020 Mar 6;11:124. doi: 10.3389/fphar.2020.00124. PMID: 32210795; PMCID: PMC7069528.

13. Beggiato S, Tomasini MC, Cassano T, Ferraro L. Chronic Oral Palmitoylethanolamide Administration Rescues Cognitive Deficit and Reduces Neuroinflammation, Oxidative Stress, and Glutamate Levels in A Transgenic Murine

Model of Alzheimer's Disease. J Clin Med. 2020 Feb 5;9(2):428. doi: 10.3390/jcm9020428. PMID: 32033363; PMCID: PMC7074257.

14. Cassano T, Calcagnini S, Carbone A, Bukke VN, Orkisz S, Villani R, Romano A, Avolio C, Gaetani S. Pharmacological Treatment of Depression in Alzheimer's Disease: A Challenging Task. Front Pharmacol. 2019 Sep 27;10:1067. doi: 10.3389/fphar.2019.01067. PMID: 31611786; PMCID: PMC6777507.

15. Bronzuoli MR, Facchinetti R, Valenza M, Cassano T, Steardo L, Scuderi C. Astrocyte Function Is Affected by Aging and Not Alzheimer's Disease: A Preliminary Investigation in Hippocampi of 3xTg-AD Mice. Front Pharmacol. 2019 Jun 6;10:644. doi: 10.3389/fphar.2019.00644. PMID: 31244658; PMCID: PMC6562169.

16. Sharma N, Tramutola A, Lanzillotta C, Arena A, Blarzino C, Cassano T, Butterfield DA, Di Domenico F, Perluigi M, Barone E. Loss of biliverdin reductase-A favors Tau hyper-phosphorylation in Alzheimer's disease. Neurobiol Dis. 2019 May;125:176-189. doi: 10.1016/j.nbd.2019.02.003. Epub 2019 Feb 6. PMID: 30738142.

17. Cassano T, Magini A, Giovagnoli S, Polchi A, Calcagnini S, Pace L, Lavecchia MA, Scuderi C, Bronzuoli MR, Ruggeri L, Gentileschi MP, Romano A, Gaetani S, De Marco F, Emiliani C, Dolcetta D. Early intrathecal infusion of everolimus restores cognitive function and mood in a murine model of Alzheimer's disease. Exp Neurol. 2019 Jan;311:88-105. doi: 10.1016/j.expneurol.2018.09.011. Epub 2018 Sep 20. PMID: 30243986.

18. Barone E, Tramutola A, Triani F, Calcagnini S, Di Domenico F, Ripoli C, Gaetani S, Grassi C, Butterfield DA, Cassano T, Perluigi M. Biliverdin Reductase-A Mediates the Beneficial Effects of Intranasal Insulin in Alzheimer Disease. Mol Neurobiol. 2019 Apr;56(4):2922-2943. doi: 10.1007/s12035-018-1231-5. Epub 2018 Aug 2. PMID: 30073505.

19. Tramutola A, Sharma N, Barone E, Lanzillotta C, Castellani A, Iavarone F, Vincenzoni F, Castagnola M, Butterfield DA, Gaetani S, Cassano T, Perluigi M, Di Domenico F. Proteomic identification of altered protein O-GlcNAcylation in a triple transgenic mouse model of Alzheimer's disease. Biochim Biophys Acta Mol Basis Dis. 2018 Oct;1864(10):3309-3321. doi: 10.1016/j.bbadis.2018.07.017. Epub 2018 Jul 18. PMID: 30031227.

20. Bronzuoli MR, Facchinetti R, Steardo L Jr, Romano A, Stecca C, Passarella S, Steardo L, Cassano T, Scuderi C. Palmitoylethanolamide Dampens Reactive Astrogliosis and Improves Neuronal Trophic Support in a Triple Transgenic Model of Alzheimer's Disease: In Vitro and In Vivo Evidence. Oxid Med Cell Longev. 2018 Jan 16;2018:4720532. doi: 10.1155/2018/4720532. PMID: 29576849; PMCID: PMC5822864.

21. Scuderi C, Bronzuoli MR, Facchinetti R, Pace L, Ferraro L, Broad KD, Serviddio G, Bellanti F, Palombelli G, Carpinelli G, Canese R, Gaetani S, Steardo L Jr, Steardo L, Cassano T. Ultramicronized palmitoylethanolamide rescues learning and memory impairments in a triple transgenic mouse model of Alzheimer's disease by exerting anti-inflammatory and neuroprotective effects. Transl Psychiatry. 2018 Jan 31;8(1):32. doi: 10.1038/s41398-017-0076-4. PMID: 29382825; PMCID: PMC5802581.

22. Bellanti F, Iannelli G, Blonda M, Tamborra R, Villani R, Romano A, Calcagnini S, Mazzoccoli G, Vinciguerra M, Gaetani S, Giudetti AM, Vendemiale G, Cassano T, Serviddio G. Alterations of Clock Gene RNA Expression in Brain Regions of a Triple Transgenic Model of Alzheimer's Disease. J Alzheimers Dis. 2017;59(2):615-631. doi: 10.3233/JAD-160942. PMID: 28671110; PMCID: PMC5523844.

23. Pardeshi R, Bolshette N, Gadhave K, Ahire A, Ahmed S, Cassano T, Gupta VB, Lahkar M. Insulin signaling: An opportunistic target to minify the risk of Alzheimer's disease. Psychoneuroendocrinology. 2017 Sep;83:159-171. doi: 10.1016/j.psyneuen.2017.05.004. Epub 2017 May 30. PMID: 28624654.

24. Gatta E, Lefebvre T, Gaetani S, dos Santos M, Marrocco J, Mir AM, Cassano T, Maccari S, Nicoletti F, Mairesse J. Evidence for an imbalance between tau O-GlcNAcylation and phosphorylation in the hippocampus of a mouse model of Alzheimer's disease. Pharmacol Res. 2016 Mar;105:186-97. doi: 10.1016/j.phrs.2016.01.006. Epub 2016 Jan 24. PMID: 26816085.

25. Barone E, Di Domenico F, Cassano T, Arena A, Tramutola A, Lavecchia MA, Coccia R, Butterfield DA, Perluigi M. Impairment of biliverdin reductase-A promotes brain insulin resistance in Alzheimer disease: A new paradigm. Free Radic Biol Med. 2016 Feb;91:127-42. doi: 10.1016/j.freeradbiomed.2015.12.012. Epub 2015 Dec 15. PMID: 26698666.

26. Romano A, Pace L, Tempesta B, Lavecchia AM, Macheda T, Bedse G, Petrella A, Cifani C, Serviddio G, Vendemiale G, Gaetani S, Cassano T. Depressive-like behavior is paired to monoaminergic alteration in a murine model of Alzheimer's disease. Int J Neuropsychopharmacol. 2014 Oct 31;18(4):pyu020. doi: 10.1093/ijnp/pyu020. PMID: 25609597; PMCID: PMC4360228.

27. 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 G. Glutamatergic alterations and mitochondrial impairment in a murine model of Alzheimer disease. Neurobiol Aging. 2012 Jun;33(6):1121.e1-12. doi: 10.1016/j.neurobiolaging.2011.09.021. Epub 2011 Oct 27. PMID: 22035587.

28. 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. Behav Brain Res. 2011 Oct 31;224(2):408-12. doi: 10.1016/j.bbr.2011.06.029. Epub 2011 Jun 30. PMID: 21741995.

29. Trabace L, Cassano T, Colaianna M, Castrignanò S, Giustino A, Amoroso S, Steardo L, Cuomo V. Neurochemical and neurobehavioral effects of ganstigmine (CHF2819), a novel acetylcholinesterase inhibitor, in rat prefrontal cortex: an in vivo study. Pharmacol Res. 2007 Oct;56(4):288-94. doi: 10.1016/j.phrs.2007.07.006. Epub 2007 Jul 27. PMID: 17822918.

C. Research Support.

Research grants obtained as coordinator:

2000: Young Research Grant Univ. of Bari
2003: Univ. of Foggia Intramural Research Grant
2004: Univ. of Foggia Intramural Research Grant
2005: Univ. of Foggia Intramural Research Grant
2005: Scientific coordinator of a grant for a position of research associate
2006: Univ. of Foggia Intramural Research Grant
2011: Project for International Cooperation between Universities– Univ. di Foggia and Univ. of Hebron
2023: Project PNRR “HEAL ITALIA - Health Extended Alliance for Innovative Therapies, Advanced Lab-research, and Integrated Approaches of Precision Medicine”, SPOKE 3: (Prediction models) WP 4: (Preclinical models for precise therapeutic and diagnostic prevention strategies) Task 5 - Task Scientifica 4.5: Mouse models of mitochondrial metabolism.

Research grants obtained as participant:

2003: National Research Project (PRIN 2003), University of Bari
2004: National Research Project (PRIN 2004), University of Palermo
2005: National Research Project (PRIN 2005), University of Foggia
2009: National Research Project (PRIN 2009), University of Foggia
2010-2014: Seventh Framework Programme (FP7), “Prediction of cognitive properties of new drug candidates for neurodegenerative diseases in early clinical development (PharmaCog)” – University of Foggia
2021: National Research Project “GREEN PHARMA. R.D.I. – GREEN compounding and PHARMAceutical Repurposing for rare Diseases Innovation ecosystem”. CUP E27B22000160001.