CV MILANESE MARCO



MARCO MILANESE, PhD

Date of birth: 9th Sept. 1979

Affiliation: University of Genoa, Dept. of Pharmacy -

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Google Scholar profile: https://scholar.google.com/citations?hl=it&user=-

fl30lsAAAAJ&view op=list works&sortby=pubdate

LinkedIn profile: https://www.linkedin.com/in/milanese-marco-97b70723/

EDUCATION & CAREER

2018. Positive assessment (subsec. 5, art. 24, law 2010/240) for the advancement to Associate Professor at the Dept. of Pharmacy, Univ. of Genoa, Italy.

2017. National Scientific Qualification (ASN) positive assessment for the advancement to Associate Professor (subsec. 1 art. 16, law 2010/240).

2009. PhD in Biochemistry, Univ. of Genoa - Genoa - Italy; Ph.D School of Molecular and Clinical Experimental Medicine and Biology.

2005. Degree in Pharmaceutical Chemistry and Technology (cum laude), Univ. of Genoa - Genova - Italy.

PERSONAL STATEMENT

Since 2005 Marco Milanese is member of a research Unit working in the field of neuropharmacology and neurosciences. Marco Milanese holds a long-lasting experience in training undergraduate students and PhD student and managing a biological research laboratory with a broad panel of expertise. The scientific research of Marco Milanese started focusing on neurotransmission and related molecular mechanisms underlying neurodegenerative processes: release of neuro- and glio-transmitters and modulation systems, pre-synaptic proteins, pharmacological characterizations of pre- and post-synaptic glutamatergic receptors, physiological and pathological implications; an aspect that has characterized the scientific research of Marco Milanese, is based on the study of glutamatergic neurotransmission linked to excitotoxicity in neurodegenerative diseases, with particular interest on motor neuron diseases (MND) and amyotrophic lateral sclerosis (ALS); with regard to these aspects, the main expertise exploited by Marco Milanese are characterized by in-vivo behavioural studies, ex-vivo and in-vitro functional studies to evaluate the clinical progression and the molecular dysfunctions underlying neurodegenerative diseases and/or other neurological disorders. The areas of investigation and research, in the context of ALS, have expanded towards in vitro studies on astrocytes, microglia, oligodendrocytes and motoneurons primary cell cultures, obtained from experimental mouse models of ALS. Another area of research of Milanese Marco is represented by the study of acute and chronic stress events and their correlation with neurological disorders such as depression and post-traumatic stress disorder (PTSD) and pharmacological treatments aimed at restoring the alteration of glutamatergic and GABAergic neurotransmission.

Marco Milanese holds active scientific collaborations with various National and International research groups, as intelligible from the publication track record: IIT Genova; ETT Genova; Istituto Gaslini Genova; CNR Genova and Pisa; SISSA Trieste; Mario Negri Institute, Milan; University of Milan; University of Firenze; University of Ancona; University of Naples; University of Calabria; University of Turin; MRC Toxicology Unit Leicester UK; Neurotune Research Switzerland; METHYS Pharmaceutical, Switzerland; IONIS Pharmaceutical Inc. USA; Center for Neurogenomics and Cognitive Research, VU University Amsterdam; Sheffield Institute of Translational Neuroscience (SITraN), University of Sheffield; VIB Vesalius Research Center KU Leuven, Belgium, Universitè de Lausanne, Maastricht University.

WORK EXPERIENCE and POSITIONS:

2018-current. Associate Professor of pharmacognosy and pharmacology; Dept. of Pharmacy, Univ. of Genoa, Italy. (14 publ. produced in this period)

2018-current. Lecturer of pharmacology, Degree Course in Dental Hygiene. School of Medical and Pharmaceutical Sciences, University of Genoa.

2013-current. Lecturer of pharmacognosy, Degree Courses in Pharmaceutical Chemistry and Pharmacy; School of Medical and Pharmaceutical Sciences, Department of Pharmacy, University of Genoa.

2012-2018. Researcher; Dept. of Pharmacy, Pharmacology and Toxicology Unit, Univ. of Genoa, Italy. (30 publ. produced during this experience)

2009-2012. Postdoctoral fellow; Dept. of Exp. Medicine, Pharmacology and Toxicology Unit, Univ. of Genoa, Italy. (13 publ. produced during this experience).

2008. Visiting scientist, MRC Toxicology Unit, Apoptosis and Cancer Group, Leicester, UK. (1 publ. produced during this experience).

2006-2009. PhD student; Dept. of Exp. Medicine, Pharmacology and Toxicology Unit, Univ.y of Genoa, Italy. (9 publ. produced during this experience).

2003-2005. Undergraduate internship: Dept of Exp. Medicine, Pharmacology and Toxicology Unit, Univ. of Genoa, Italy.

OTHER EXPERIENCES:

- 2022-. Member of the Didactic Committee for the Academic Courses of Pharmaceutical Chemistry and Technology and Pharmacy, Department of Pharmacy, University of Genoa.
- 2020 . Coordinator of the Pharmacology and Toxicology Unit, Department of Pharmacy, University of Genoa.
- 2019 . Member of the Mentoring and Orientation Committee, Department of Pharmacy, University of Genoa.
- 2017 . Member of the Editorial Board of J. Pharmacology and Toxicology
- 2017 . Member of the Athenaeum Committee Scienze della Vita
- 2017 . Member of the Inter-Universitary Center for the Promotion of the Principles of the 3Rs in Teaching and Research.
- 2017 . Director of the on-line scientific newsletter "SIF giovani Journal club"
- 2016 . Member of the Center of Excellence for the study of molecular mechanisms of cell communication: from basic research to clinical practice (CEBR).
- 2016 . Member of the Editorial Board of Austin J. Pharmacology & Pharmaceutics
- 2015 2017. Member of Committee for young researcher, Italian Pharmacology Society.
- 2014 . Member of the Steering Committee for the Biomedical Sciences Istituto Studi Superiori IANUA-ISSUGE Univ. of Genoa.
- 2014 . Member of the editorial series "SIF ricerca di base" [ISSN 2465-1079]
- 2013 . Member of the Academic Board of the PhD School of Mol. and Clin. Exp. Med. and Biol. (DOT1311778), Univ. of Genoa.
- 2013-2017. Member of the Editorial Board of Hindawi J. Advances in Neuroscience.
- 2012-2017. Member of the Editorial Board of Hindawi Scientifica J. Neuroscience Subject Area.
- 2011 . Member of the Italian Society of Pharmacology (SIF).
- 2007 . Member of the Federation of European Neurosciences (FENS).
- 2007 . Member of the Italian Society of Neuroscience (SINS).
- 2006 . National license for the professional career of Pharmacist.

EDITORIAL AND REVIEWER ACTIVITIES

- Editorial activities: Guest Editor for a Special issue published in Biomolecules (MDPI Editor).
- Editorial Board member: Advances in Neuroscience-Hindawi Publishing Corporation; Scientifica Journal-Neuroscience Hindawi Publishing Corporation.
- Reviewer for peer-review scientific journals: Biomolecules, International journal of molecular scinces, Scientific Reports, Frontiers in cellular neuroscience, Frontiers in neuroscience; Frontiers in Aging neuroscience, Frontiers in pharmacology, Brain, Cell transplantation, Advances in Pharmacological Sciences, Annals of neurodegenerative disorders, Scientifica Journal-Neuroscience.
- Reviewer for Project Grant peer review process: Motor Neuron Disease Association (UK) project grants, University of Florence and Cassa di Risparmio di Firenze foundation for neurodegenerative disease research projects.
- Registered in the international MIUR Register of Expert Peer-Reviewers for Italian Scientific Evaluation (REPRISE).

HONORS AND AWARDS:

2019 "Miltenyi Biotec Astrocyte Award". Miltenyi Biotec

2017 "SIF Ricerca di Base" Award

2016 "SIF Ricerca di Base" Award

2016 The best oral presentation award; "Controversies in Neurodegeneration" – Catania 9-10 June, 2016.

2015 "SIF Ricerca di Base" Award

2012 SINS travel grant for the "XIV Italian society for Neuroscience"

2010 SINS Travel Grant for the "7th FENS Forum of European Neuroscience"

2009 SINS Travel Grant for the "13th Congress of the Italian Society for Neuroscience"

2006 The best poster award; "XV" Congress Italian Society of Neuropsycopharmacology.

ROLES IN RESEARCH PROJECTS LICENCE INVOLVING ANIMALS FRO SCIENTIFIC PURPOSE (APPROVED BY THE MINISTRY OF HEALTH)

2020 – . (after Legislative Decree 26/2014). Role as Project Manager (approval No. 1022/2020-PR).

2017 – 2022. (after Legislative Decree 26/2014). Role as head of the execution of the experiments in research projects (Project Manager Prof. G. Bonanno – approval No. 97/2017-PR; 482/2017-PR).

2013 – 2017. Role as head of the execution of the experiments in research projects (Project Manager Prof. G. Bonanno).

2010 – 2013. Role as personnel involved in the execution of the experiments in research projects (Project Manager Prof. G. Bonanno).

MEETING ATTENDANCE & ORAL COMUNICATIONS (selected by the scientific Committee or invited talk):

Marco Milanese is author of more than 140 contributions to National&International scientific meetings: 50 as first/last author and gives 18 talks as invited speaker or selected by Scientific Committees.

- 1. 2023 microRNAs shuttled by extracellular vesicles derived from mesenchymal stem cells revert glial activation and neurotoxicity in in-vitro models of amyotrophic lateral sclerosis. 6th International Meeting on Cognitive And Behavioral Neurosciences, On-line event. 21st March 2023.
- 2. 2023 The mGlu5 receptor negative allosteric modulator CTEP as a pharmacological tool to dampen ALS disease progression: in-vivo preclinical studies and clinical perspectives. 1st International Meet on Pharmaceutics and Drug Delivery Systems, Rome 9-11 February 2023.
- 3. 2022 The mGlu5 receptor negative allosteric modulator CTEP improves the ALS disease course in an in-vivo pre-clinical study. 41th Congress of the Italian Pharmacological Society, Rome, 16-19 November.
- 4. 2022 microRNAs shuttled by extracellular vesicles derived from mesenchymal stem cells rescue glial activation in in-vitro models of amyotrophic lateral sclerosis. 35th world congress on Pharmacology, 01 August on-line event.
- 5. 2021 In-vivo and in-vitro evidence supporting the role of mGlu5 receptor as a key regulator of glutamate downstream effects in ALS. 19th Italian Society for Neuroscience National Congress, 9-11 September, Brescia. on-line event.
- 6. 2021 In-vitro and in-vivo studies depict metabotropic glutamate receptor 5 as a potential pharmacological target to modulate disease progression in ALS. 40th Congress of the Italian Pharmacological Society, Rome, 9-13 Marzo on-line event.
- 7. 2021 *In-vivo* and *in-vitro* evidence supporting the mGlu5 receptor as a pharmacological target for amyotrophic lateral sclerosis. 34th world congress on Pharmacology, 16-17 August on-line event.
- 8. 2020 Modulating the reactive phenotype of astrocytes as a therapeutic approach in amyotrophic lateral sclerosis. Motor neuron diseases: understanding the pathogenetic mechanisms to develop therapies, Turin, 6-7 Novembre 2020.
- 9. 2019 The pathological role of astrocytes in amyotrophic lateral sclerosis: therapeutic effects of exosomes deriving from mesenchymal stem cells on mouse and human primary cell cultures. 39th Congress of the Italian Pharmacological Society, Firenze, 20-23 Novembre.
- 10. 2019 Edible flowers and safety: characterization of the toxicological profile. Workshop Project ANTEA Interreg Alcotra Programme. pHealth 2019, Genova, Italia, 10 12 Giugno 2019.
- 11. 2018 Exosome-shuttled miRNAs derived from mesenchymal stem cells modulate in-vitro the reactive phenotype of amyotrophic lateral sclerosis glial cells. "Glial cells and therapeutic perspectives: from maladaptive plasticity to neuro-restoration". Monothematic Congress of the Italian Society of Pharmacology, Firenze, 29 Giugno.
- 12. 2017 Targeting Group I metabotropic glutamate receptors in ALS. 38th Congress of the Italian Pharmacological Society, Rimini, 24-28 Ottobre.
- 13. 2016 Astrocyte contribution to the excessive glutamate release in the spinal cord of the SOD1^{G93A} mouse model of amyotrophic lateral sclerosis "More than neuron. Towards a less neuronocentric view of brain disorder", Torino, 1-3 Dicembre.
- 14. 2016 miRNAs shuttled by exosomes derived from primed-MSCs affect the activated-microglia phenotype and possibly support the therapeutic effects of MSC administration in SOD1G93A mice. "Controversies in Neurodegeneration" Monothematic Congress of the Italian Society of Pharmacology, Catania, 9-10 Giugno.

- 15. 2015 Group I metabotropic glutamate receptors and neurotoxicity in amyotrophic lateral sclerosis. Symposium Title: the complexity of motor neuron diseases; 16th Congress of the Italian Society for Neuroscience, Cagliari, 8-11 Ottobre.
- 16. 2014 Investigating the role of group I metabotropic glutamate receptors in amyotrophic lateral sclerosis. Looking inside neurons for a better pharmacological intervention: the contribution of imaging to the study of neurodegenerative diseases. Monothematic Congress of the Italian Society of Pharmacology, Catania, 20 Giugno.
- 17. 2013 Amyotrophic lateral sclerosis and excitotoxicity: role of Group I metabotropic glutamate receptors
 Symposium Title: Amyotrophic lateral sclerosis, a multifactorial neurodegenerative disease; 15th Congress of the Italian Society for Neuroscience, Roma, 3-5 Ottobre.
- 18. 2010 Abnormal and precocious exocytotic glutamate release in the spinal cord of a mouse model of amyotrophic lateral sclerosis. New Perspectives in Neuroscience: Joint Meeting of Young Italian and Japanese Neuroscientists, Naples, 21 Settembre.

RESEARCH GRANTS:

2022: PNRR (Piano Nazionale di Ripresa e Resilienza, call 2021): MNESYS Porject - (36 months; grant assigned to the Department 500000€, Participant for the spokes 3 and 6)

2022: Italian Ministry of Health (POS call 2021): Hybrid Hub_H2UB - (48 months; 454500€, Research Unit coordinator)

2020: AriSLa Full Project (call 2019): GPR17ALS (36 months; 80000€, Participant)

2019: AriSLa Pilot Project (call 2018): GPR17ALS (15000€, Participant)

2019: Italian MIUR PRIN Project (90000€, Participant)

2018: Financial agreement, Methys Pharmaceutical, Switzerland (27000€, Principal Investigator)

2018: San Paolo Project-ROL 20571 (36 months, 167000€, Participant)

2017: European Project- Interreg. V-A France-Italy - ALCOTRA: ANTEA (50000€, Participant)

2017: MNDa Biomedical Research Project- UK -: Apr16/848-791 (2017-2019, 115,000£, Participant)

2016: AriSLa Pilot Project (call 2016): GPR17ALS (15000€, Participant)

2016: Italian MIUR PRIN Project (call 2015): 2015HRE757 (110000€, Participant)

2015: Italian MIUR - SIR Project (Scientific Independence of young Researchers): RBSI14B1Z1 (358000€, Principal Investigator)

2013: Athenaeum Project - University of Genoa (Principal Investigator)

2012: Athenaeum Project - University of Genoa (Principal Investigator)

2012: Italian MIUR PRIN Project: 2012A9T2S9_002 (Participant)

2009: Italian MIUR PRIN Projects: 2009BRMW4W 002; 2009R7WCZS 003; 2009P7WHNR 003 (Participant)

2008: Italian MIUR PRIN Project: 2008LCKEXC_003 (Participant)

BIBLIOMETRIC INDECES (Scopus):

Author of 70 papers on peer-reviewed journals.

Total impact factor: 318.53, average impact factor: 4.826; total citations received: 2027; H-index: 26; Cite score average 5.655.

Scopus Author ID: 7006104240 ResearcherID: C-4444-2013

ORCID ID: orcid.org/0000-0003-3384-0666

ASN threshold for the Full Professor position: 10 years publications: 45 (threshold: 25), 15 years total citations: 1780 (threshold: 864), 15 years H-index: 24 (threshold: 17).

For Member of the ASN board Committee: 10 years publications: 45 (threshold: 39), 15 years total citations: 1780 (threshold: 1673), 15 years H-index: 24 (threshold: 23).

VQR evaluation 2011-2014: excellent VQR evaluation 2015-2019: excellent

LIST OF PUBLICATIONS:

1. Forti et al., 2023; PMID: 37240064

2. Bonifacino et al., 2023; PMID: 36806044

3. Balbi et al., 2023; PMID: 36982315

4. Provenzano et al., 2022; PMID: 36497181

5. Bonifacino et al., 2022; PMID: 36552791

- 6. Sala et al., 2022; PMID: 35370690
- 7. Kumar et al., 2022; PMID: 35327542
- 8. Giunti et al.,2021; PMID: 33462263
- 9. Bonifacino et al., 2021; PMID: 34830115
- 10. Marini et al.,2021; PMID: 34573024
- 11. Bonalume et al., 2021; PMID: 34174096
- 12. Milanese et al., 2021; PMID: 33931856
- 13. Burlando et al., 2020; PMID: 33332476
- 14. Marini et al., 2020; PMID: 32638178
- 15. Bonfanti et al., 2020; PMID: 3224429
- 16. Bonifacino et al., 2019; PMID: 31540330
- 17. Ravera et al., 2019; PMID: 31282572
- 18. Bonifacino et al., 2019; PMID: 31102766
- 19. Tornese et al., 2019; PMID: 31193464
- 20. Cerrato et al., 2018; PMID:29732603
- 21. Ravera et al., 2018; PMID:29656361
- 22. Bosco et al., 2018; PMID:29508281
- 23. Bonifacino et al., 2017; PMID: 28645622
- 24. Bonfiglio et al., 2017; PMID: 28125677
- 25. Romei et al., 2016; PMID: 27565422
- 26. Bonifacino et al., 2016; PMID: 27425885
- 27. Bonini et al., 2016; PMID: 26966584
- 28. Bragina et al., 2015; PMID: 26388733
- 29. Milanese et al., 2015; PMID: 25497732
- 30. Carney et al., 2014; PMID: 25151305
- 31. Stifanese et al., 2014; PMID: 25151305
- 32. Treccani et al., 2014; PMID: 24535456
- 33. Treccani et al., 2014; PMID: 24658610
- 34. Fariello et al., 2014; PMID:24486381
- 35. Calabrese et al., 2014; PMID: 24424289
- 36. Milanese et al., 2014; PMID:24361555
- 37. Begenisic et al., 2014; PMID: 24269730
- 38. Milanese et al., 2014; PMID: 24273061
- 39. Ramoino et al., 2014; PMID: 24143028
- 40. Di Prisco et al., 2013; PMID:23958452
- 41. Russo et al., 2013; PMID:23936321
- 42. Milanese et al., 2013; PMID:23895555
- 43. Scali et al., 2013; PMID: 23860568
- 44. Pocci M, et al., Polymer Journal, 2013; 45: 1146-1152.
- 45. Loi, et al., 2013; PMID: 23714122
- 46. Cervetto, et al., 2013; PMID: 23293841
- 47. Giribaldi, et al., 2013; PMID:22634363
- 48. Molinaro, et al., 2013; PMID:22634363
- 49. Nasrabady, et al., 2012; PMID:22561282
- 50. Baroncelli, et al., 2012; PMID:22532989
- 51. Bigini et al., 2012; PMID:22302580
- 52. Uccelli et al., 2012; PMID:22302580
- 53. Begenisic et al., 2011; PMID: 22207837
- 54. Milanese et al., 2011; PMID:21175617
- 55. Bari et al., 2011; PMID:20711816
- 56. Tardito et al., 2010; PMID: 20525261
- 57. Ramoino, et al., 2010; PMID: 20348336

- 58. Milanese et al., 2010; PMID: 20132478
- 59. Musazzi, et al., 2010; PMID: 20052403
- 60. Gallus et al., 2010; PMID:19882419
- 61. Stifanese et al., 2010; PMID:19880516
- 62. Rossi et al., 2009; PMID:19706685
- 63. Milanese et al., 2009; PMID:19607977
- 64. Bonanno et al., 2009; PMID:19576518
- 65. Bianchi et al., 2009; PMID:18829665
- 66. Raiteri et al., 2008; PMID:17597258
- 67. Paluzzi et al., 2007; PMID:17935604.
- 68. Bonanno et al., 2007; PMID: 17678956
- 69. Raiteri et al., 2007; PMID:17662048
- 70. Pedrazzi et al., 2006; PMID:16911580