

Martina Gabrielli Curriculum Vitae et Studiorum

Personal data

A – ACADEMIC DEGREES

PhD PHARMACOLOGICAL SCIENCES
Dottorato in: Scienze Farmacologiche

Completion date: **11/01/2016**

Institution: **University of Milan**

Reference to: PhD Diploma, released in Milan (Italy) on April 29th 2016 by University of Milan, signed by the Rector Prof. Gianluca Vago, registered at N°222668/2016 of N°2016 register, matricula N°R10167

MSc, Master's Degree MEDICAL BIOTECHNOLOGY AND MOLECULAR MEDICINE
Laurea Magistrale in: Biotecnologie Mediche e Medicina Molecolare (classe LM9)

Curriculum: **Neurosciences**

Academic Year of Completion: **2010-2011**

Completion date: **28/02/2012**

Institution: **University of Milan**

Score: **110/110 cum Laude**

Reference to: Master Diploma, released in Milan (Italy) on October 9th 2012 by University of Milan, signed by the Rector Prof. Enrico Decleva, registered at N°177003/11/3 of N°2012 register, matricula N°771541

BSc, Bachelor's Degree MEDICAL BIOTECHNOLOGIES
Laurea Triennale in: Biotecnologie Mediche (classe 1)

Academic Year of Completion: **2008-2009**

Completion date: **16/07/2009**

Institution: **University of Milan**

Final score: **109/110**

Reference to: Bachelor Diploma, released in Milan (Italy) on June 8th 2010 by University of Milan, signed by the Rector Prof. Enrico Decleva, registered at N°151228/09/1 of N°2010 register, matricula N°688752

B – EMPLOYMENT/RESEARCH EXPERIENCE

October 16th 2019-October 15th 2021 CNR Senior Postdoc Fellow (Assegno di ricerca CNR tipologia C)

In Dr Claudia Verderio's laboratory

at *CNR Institute of Neuroscience*, via Vanvitelli 32, 20129, Milan (Italy)/via Raul Follereau, 3, Veduggio al Lambro (MB)

Reference to: Letter of assignment from Prof. Michela Matteoli, protocol number 0003598, dated 14/10/2016;

prolonged for 12 additional months prot. n. 0005133/2020 del 13/11/2020 signed from Prof. Michela Matteoli

Project: *Ruolo delle vescicole extracellulari rilasciate da microglia esposta a beta-amiloide sulla propagazione di disfunzioni sinaptiche in neuroni ippocampali in coltura*

Main activities: I performed optical manipulation experiments coupled to time-lapse imaging, electrophysiological recordings and immunocytochemistry/immunohistochemistry analysis (using spinning disk and ImageJ software) in order to study the role of extracellular vesicles (EVs) released by A β -activated primary microglial cultures in the propagation of synaptic dysfunction in Alzheimer's disease. I am also contributing to a study on the effects of EVs released by macrophages activated with different stimuli (included mesenchymal stem cells (MSCs) indirect co-culture) on oligodendrocyte precursor cells' vitality, proliferation, migration, differentiation and myelin deposition ability, carried out through immunofluorescence (immunocytochemistry/immunohistochemistry) analysis by confocal microscopy and using ImageJ software. I performed vitality, proliferation and senescence analysis on primary microglial cultures. I have been Referee for the Italian Multiple Sclerosis Foundation (FISM) to review grant proposal, as well as for peer-reviewed journals.

October 1st 2017-September 30th 2019 FISM Senior Research Fellow

Mentored by Dr Claudia Verderio

at *CNR Institute of Neuroscience*, via Vanvitelli 32, 20129, Milan (Italy)

Title of the project: *Microglia versus macrophage effects on oligodendrocyte precursor cells: role of extracellular vesicles*

Reference to: Notice of award from FISM (Italian Multiple Sclerosis Foundation), dated February 20th 2017, protocol number 30/17/F14

- Main activities: I explored the effects of extracellular vesicles (EVs) released by primary cultured microglia and macrophages, activated with different stimuli (included mesenchymal stem cells (MSCs) indirect co-culture), on oligodendrocyte precursor cells' vitality, proliferation, migration, differentiation and myelin deposition ability, through immunofluorescence (immunocytochemistry/immunohistochemistry) analysis by confocal microscopy and using ImageJ software. I also worked on a project exploring the effects of EVs released by A β -activated primary microglial cultures on the synapse. I have been Referee for the Italian Multiple Sclerosis Foundation (FISM) to review grant proposal.
- April 1st 2017- September 30th 2017** **Fondazione Umberto Veronesi Research Fellow at Columbia University in New York (USA)**
Mentored by Prof. Ottavio Arancio, in his laboratory
at Taub Institute for Research on Alzheimer's Disease and The Aging Brain at Columbia University in New York, New York (USA)
- Reference to: Notice of award from Fondazione Umberto Veronesi, signed by the president and legal representative of the foundation Paolo Veronesi, dated December 5th 2016
- Main activities: I evaluated the effects of EVs from A β -activated primary cultured microglia on synaptic plasticity on cultured neurons.
- November 21st 2016- March 31st 2017** **CNR Research Fellow (Assegno di ricerca CNR tipologia A)**
in Dr Claudia Verderio's lab
at CNR Institute of Neuroscience, via Vanvitelli 32, 20129, Milan (Italy)
- Title of the project: Analysis of metabolic changes in microglial cells co-cultured with mesenchymal stem cells and evaluation of their action on oligodendrocytes
- Reference to: Letter of assignment from Prof. Michela Matteoli, protocol number 0003348, dated 17/11/2016
- Main activities: I studied metabolic pathway regulation upon microglial cell activation with different stimuli (included mesenchymal stem cells (MSCs) indirect co-culture) and I characterized EVs from ctrl, A β -treated or polarized microglia/macrophages through TRPS technique (IZON qNano Instrument) and ELISA (cytokine/metabolite quantifications).
- November 2nd 2015-October 31th 2016** **CNR Research Fellow (Assegno di ricerca CNR tipologia A)**
in Claudia Verderio's lab
at CNR Institute of Neuroscience, via Vanvitelli 32, 20129, Milan (Italy)
- Title of the project: Analysis of the effects of mutated prion protein on NMDA receptors through electrophysiological techniques
- Reference to: Letter of assignment from Prof. Michela Matteoli, protocol number 0003780, dated 21/10/2015
- Main activities: I performed electrophysiological analysis of mutant prion protein action on NMDA-mediated currents in cultured hippocampal neurons and I characterized EVs from differently activated primary microglia (included mesenchymal stem cells (MSCs) indirect co-culture) using TRPS technique (IZON qNano instrument) and through electrophysiological analysis of their action on hippocampal neurons.
- November 1st 2012-January 11th 2016** **PhD student**
PhD in Pharmacological Sciences at University of Milan (Italy)
in Dr Claudia Verderio's laboratory, at CNR Institute of Neuroscience, Milano (Italy)
- Allowance: Fellowship from Italian Ministero dell'Istruzione, dell'Università e della Ricerca
- Reference to: Thesis is on AIR website at <https://air.unimi.it/handle/2434/346707#.XAQWFWhKhPY>
- Main activities: PhD project aimed at investigating the role of EVs released by activated primary microglia in the modulation of inhibitory GABAergic transmission in the central nervous system and the molecular basis for their action. Data collected have been included in the paper Gabrielli et al., EMBO Rep, 2015. I collaborated to several other studies, in which I performed electrophysiological and calcium imaging recordings on cell cultures, cell survival assays and immunofluorescence analysis by confocal microscopy and ImageJ software, RNA extraction and RT-PCR analysis. I routinely established primary glial and neuronal cultures from mice new-born brains.
- ThesisTitle: *"Active Endocannabinoids are Released From Microglia in Association with Extracellular Vesicles to Inhibit GABAergic Transmission"*
- January 10th 2014-April 30th 2014** **Visiting PhD student**
at SISSA (Scuola Superiore per gli Studi Avanzati) and ELETTRA-Sincrotrone in Trieste (Italy)
in Prof. Giuseppe Legname (SISSA) and Dr. Dan Cojoc (CNR Institute of Materials)
- Reference to: letter from Dr Dan Cojoc, dated December 4th 2018, stating I frequented his lab in this period
- Main activities: I performed live imaging experiments on axonal growth cones and adult neurons in culture taking advantage of optical manipulation techniques and immunofluorescence analysis by confocal microscopy. Image analysis was performed using ImageJ software.
- July 2012-December 2012** **Operating Manager of Animal Facility**
at Filarete Servizi srl, viale Ortles, 22, Milan (Italy)
- Reference to: Contract, dated June 26th 2012, signed by me myself and Filarete Servizi srl administrator Dr Giorgio Rapari
- Main activities: I have been supervisor and operating manager of animal house activities.
- March 2012–October 2012** **Graduate Research Assistant**
In Dr Claudia Verderio's laboratory
at CNR Institute of Neuroscience, via Vanvitelli 32, 20129, Milan (Italy)
- Main activities: I performed electrophysiological recordings and applied cellular and molecular biology techniques (included calcium imaging and immunofluorescence analysis by confocal microscopy and ImageJ software, on cell cultures, RNA extraction and RT-PCR analysis) in different projects. I routinely established primary glial and neuronal cultures from mice new-born brains.

October 2010–February 2012 **Trainee for MSc in Medical Biotechnology and Molecular Medicine**

In Prof. Michela Matteoli's laboratory, under the supervision of Dr. Claudia Verderio
CNR Institute of Neuroscience and University of Milan, Dept. of Medical Biotechnology and Translational Medicine, via Vanvitelli 32, 20129, Milan (Italy)

Main activities and responsibilities: I performed electrophysiological recordings on hippocampal neurons, and applied cellular and molecular biology techniques (included calcium imaging and immunofluorescence analysis by confocal microscopy and ImageJ software, on cell cultures), in order to investigate the effects of EVs released by primary microglia in culture upon activation on excitatory Glutamatergic transmission and the molecular basis for this action. I routinely established primary glial and neuronal cultures from mice new-born brains.

Thesis title: *"Il blocco farmacologico del metabolismo degli sfingolipidi previene la modulazione della neurotrasmissione da parte di microvecicole microgliali"*

March 2009–July 2009 **Trainee for BCc in Medical Biotechnologies**

in Prof. Michela Matteoli's laboratory; University of Milano, Dept. of Pharmacology, Toxicology and Medical Chemotherapy, via Vanvitelli 32, 20129, Milano (Italy)

Main activities and responsibilities: I studied the role of SNAP-25 protein's in the modulation of calcium response at the presynaptic site by calcium analysis in synaptosomes.

Thesis title: *"Preparazione di sinaptosomi e analisi del calcio da topi eterozigoti per la proteina SNAP-25"*

C – COURSES, WORKSHOPS AND SCHOOLS

- **"Chiesi human mesenchymal stem cell handling workshop"** for PREMSTEM team, online workshop, April 8th, 2020
- **"Introductory Course on Glial Cell Biology"**, satellite of the XIV European Meeting on Glial Cells in Health and Disease, July 10-13 2019, Porto (Portugal) (reference to certificate of attendance released by the organizers)
- **"Alliance for Neuroscience" SINS Società Italiana di Neuroscienze course**, organized by SINS, at Sala Napoleonica di Palazzo Greppi on October 3rd 2018 in Milan (Italy) (reference to certificate of attendance released by the organizers (SINS))
- **Giornata Sfingolipidi Italia workshop**, organized by University of Milan, at Dept. of Health Science in Milan (Italy) on October 5th 2018 (reference to certificate of attendance by the organizers (University of Milan))
- **"Spotlight on cell biology" course**, organized by CNR Institute of Neuroscience, in Bergamo (Italy) on September 27th 2018 (reference to certificate of attendance by the organizers (CNR Institute of Neuroscience))
- **The biomarkers and biogenesis of extracellular vesicles international workshop**, organized by University of Padua, Harvard Medical School and Massachusetts General Hospital, on August 29th-31st 2018, in Padua (Italy); reference to certificate of attendance by the organizers
- **"Rodent Anesthesia and Analgesia: Computer Based Training Program"** – November 2nd, 2017 at Columbia University - New York (USA) (reference to certificate of completion released by Columbia University)
- **"Euthanasia Skill Assessment"** – April 19th, 2017 at Columbia University - New York (USA) (reference to certificate of completion released by Columbia University)
- **"Mouse Wetlab" course** – April 12th, 2017 - Columbia University - New York (USA) (reference to certificate of completion released by Columbia University)
- **"Rodent Surgery" course** – April 4th, 2017 at Columbia University - New York (USA) (reference to certificate of completion released by Columbia University)
- **"Rodent Barrier Training" course** - April 4th, 2017 at Columbia University – New York (USA) (reference to certificate of completion released by Columbia University)
- **"The Mouse and Rat: Computer Based Training" course** – April 2nd, 2017 at Columbia University - New York (USA) (reference to certificate of completion released by Columbia University)
- **"Introduction to the Institute of Comparative Medicine" course** - April 2nd, 2017 at Columbia University - New York (USA) (reference to certificate of completion released by Columbia University)
- **"La plasticità neuronale come strumento per la riabilitazione" course**, organized by CNR Institute of Neuroscience and Humanitas Neuro Center on February 16th-17th 2017 in Rozzano (MI, Italy) (Reference to certificate of attendance released by the organizers, signed by IN-CNR director Michela Matteoli)
- **"Metodi statistici applicati alla biologia e biomedicina 1.0"** – February 8th, 2017 - CNR Institute of Neuroscience – online from Padua (reference to certificate of completion released by CNR Institute of Neuroscience)
- **"Il corretto utilizzo dell'animale da laboratorio"**, organized by CNR Institute of Neuroscience on September 14th, 15th, 16th, 2016 in Padua (Italy) (reference to certificate of completion released by CNR Institute of Neuroscience)
- **International Astrocyte School 2016** – Bertinoro – 10th-16th april 2016 (reference to certificate of payment, official program and online program at ias2016.azuleon.org/program.php)
- **"Corso Introduttivo alla Sperimentazione animale"**, organized by Istituto Mario Negri on November 23rd-24th-25th, 2015 at Istituto Mario Negri in Milan (Italy) (reference to certificate of completion released by Istituto Mario Negri)
- **IZON-qNano level II Competency on IZON's Tunable Resistive Pulse Sensing (TRPS) system**: on August 25th 2015 in Milan (Italy) (reference to certificate of completion released by IZON, IZON ID number IZN-201507-0885)
- **IZON-qNano level I Competency on IZON's Tunable Resistive Pulse Sensing (TRPS) system**: on August 25th 2015 in Milan (Italy) (reference to certificate of completion released by IZON, IZON ID number IZN-201507-0877)

- **Basics of Statistics** – organized by Alta Formazione Insubria – March 2nd-3rd, 2015 (reference to certificate of completion released by Alta Formazione Insubria)
- **Confocal Microscopy Course** - organized by Fondazione Filarete, viale Ortles, Milan (Italy) on January 9th-11th, 2013 at Fondazione Filarete (reference to certificate of completion released by Fondazione Filarete, signed by Simona Rodighiero, and program of the course)
- **ImageJ Course** – organized by Fondazione Filarete, viale Ortles, Milan (Italy) on January 31st, 2012 at Fondazione Filarete (reference to certificate of completion released by Fondazione Filarete)
- **Confocal Microscopy Course** - organized by Fondazione Filarete, viale Ortles, Milan (Italy) on November 7th, 2012 at Fondazione Filarete (reference to certificate of completion released by Fondazione Filarete, signed by Simona Rodighiero)

D – SCIENTIFIC/TECHNICAL SKILLS AND COMPETENCES

- **Cell cultures:** broad experience in the preparation and maintenance of brain cells primary cultures from mice: microglia, oligodendrocytes, macrophages, neurons; experience in thawing and maintenance of murine and human mesenchymal stem cells (MSCs)
- **Molecular biology:** DNA extraction, PCR, Agarose gel electrophoresis, transfection of plasmidic DNA in cell cultures, RNA extraction and RT-PCR
- **Biochemistry and cell biology:** cell lysis; protein quantification using Bicinchoninic acid protein assay; Western Blotting; ELISA for cytokine/metabolite quantifications; calcein/PI assay for cell survival analysis
- **Immunofluorescence analysis:** broad experience in immunocytochemistry and immunohistochemistry, confocal microscopy and analysis using ImageJ software
- **Calcium-imaging:** broad experience in calcium imaging on cultures (microglia, neurons); and slices
- **Assays:** vitality, proliferation, migration, differentiation, senescence assays on cultures (microglia, neurons, oligodendrocytes)
- **Microscopy:** broad experience in bright-field, fluorescence, confocal and spinning disk microscopy; live imaging on cell cultures; use of Leica LAS AF software and Velocity
- **Slices:** vibratome and cryostat cut
- **Electrophysiology:** whole-cell patch clamp, recording miniature excitatory (AMPA and NMDA) and inhibitory post-synaptic currents from cell cultures; patch-clamp (both voltage and current clamp mode) and field potential extracellular recordings in slices
- **Extracellular vesicles:** expert in the field; broad experience in isolation of microvesicles and exosomes from cell supernatant and liquor; EV analysis through TRPS (qNano) and NTA (Nanosight)
- **Optical manipulation:** broad experience in optical tweezers technique, coupled to live imaging (confocal microscopy) and OT laser alignment
- **Animal handling:** mice and rats, animal breeding and maintenance of transgenic mouse colony; cervical dislocation w/o anaesthesia; anaesthesia; mouse surgery (see courses at section C)
- **Data analysis and statistics:** data analysis, *a priori* statistics for calculation of sample size in animal studies, criterion and post-hoc statistics; use of different software for data analysis and statistics (i.e. Origin8, SigmaStat5, Prism5, G*Power3.1)
- **Computer and software:** Windows Office package, graphic software (i.e. Adobe Photoshop, Inkscape), EndNote X5 software for references and bibliography and other software specified in previous points

E – HONORS AND AWARDS

- Network Glia stipend to participate to the XIV European GLIA Meeting, July 10-13 2019, Porto (Portugal) (reference to Certificate confirming that I was awarded the stipend, signed by the President of Network Glia Prof. Helmut Kettenmann)
- FENS, The Brain Prize and IBRO-PERC stipend to attend FENS Brain Conference, May 5-8 2019, Copenhagen (Denmark) (reference to Certificate confirming that I was awarded the stipend, signed by the Chair of Brain Conference Dr Ray Dolan)
- Scholarship, as winner of abstract contest, to attend ESN 2015 meeting in Tartu (Estonia) as speaker at the ESN Young Member Symposia, June 14th-17th, 2015, Tartu (Estonia) (reference to ESN 2015 program and the journal SpringerPlus 4(Suppl 1):L29, June 2015, DOI: 10.1186/2193-1801-4-S1-L29)

F – PUBLICATIONS

Official H-index (Scopus): 9 - ORCID: 0000-0003-4958-541X - Scopus Author ID: 54890055500 - ResearcherID: X-8148-2018

- J Extracell Vesicles. 2021 Jul;10(9):e12114. doi: 10.1002/jev2.12114. Epub 2021 Jul 12. PMID: 34276899; PMCID: PMC8275823.
Astrocytes-derived extracellular vesicles in motion at the neuron surface: Involvement of the prion protein.
D'Arrigo G, **Gabrielli M**, Scaroni F, Swuec P, Amin L, Pegoraro A, Adinolfi E, Di Virgilio F, Cojoc D, Legname G, Verderio C.
- Development. 2021 Jun 15;148(12):dev194951. doi: 10.1242/dev.194951. Epub 2021 Jun 28. PMID: 34081130.
The histone demethylase PHF8 regulates astrocyte differentiation and function.
Iacobucci S, Padilla N, **Gabrielli M**, Navarro C, Lombardi M, Vicioso-Mantis M, Verderio C, de la Cruz X, Martínez-Balbás MA.
- Front Pharmacol. 2021 Mar 15;12:654023. doi: 10.3389/fphar.2021.654023. PMID: 33790800; PMCID: PMC8006391.
Role of ATP in Extracellular Vesicle Biogenesis and Dynamics.
Lombardi M, **Gabrielli M**, Adinolfi E, Verderio C.
- Acta Neuropathol. 2019 Jul 30. 138, 6 987-1012 doi: 10.1007/s00401-019-02049-1. http://www.ncbi.nlm.nih.gov/pubmed/31363836
Detrimental and protective action of microglial extracellular vesicles on myelin lesions: astrocyte involvement in remyelination failure
Lombardi M, Parolisi R, Scaroni F, Bonfanti E, Gualerzi A, **Gabrielli M**, Kerlero De Rosbo N, Uccelli A, Giussani P, Viani P, Garlanda C, Abbracchio MP, Cheebane L, Buffo A, Fumagalli M, Verderio C

- J Lipid Res. 2018 Aug; 59(8):1325-1340. doi: 10.1194/jlr.R083915. <http://www.ncbi.nlm.nih.gov/pubmed/29853528>
Role for Sphingolipids in the biogenesis and biological activity of extracellular vesicles
Verderio C, **Gabrielli M** and Giussani P
- Acta Neuropathol. 2018 Jan 4. doi: 10.1007/s00401-017-1803-x. <http://www.ncbi.nlm.nih.gov/pubmed/29302779>
Glia-to-neuron transfer of miRNAs via extracellular vesicles: a new mechanism underlying inflammation-induced synaptic alterations
Prada I, **Gabrielli M**, Turola E, Iorio A, D'Arrigo G, Parolisi R, De Luca M, Pacifici M, Bastoni M, Lombardi M, Legname G, Cojoc D, Buffo A, Furlan R, Peruzzi F, Verderio C
- Front Pharmacol. 2017 Dec 13;8:910. doi: 10.3389/fphar.2017.00910. <http://www.ncbi.nlm.nih.gov/pubmed/29321741>
ATP Modifies the Proteome of Extracellular Vesicles Released by Microglia and Influences Their Action on Astrocytes.
Drago F, Lombardi M, Prada I, **Gabrielli M**, Joshi P, Cojoc D, Franck J, Fournier I, Vizioli J, Verderio C
- Sci Rep. 2017 Jan 30;7:41734. doi: 10.1038/srep41734. <http://www.ncbi.nlm.nih.gov/pubmed/28134307>
Fingolimod limits acute Aβ neurotoxicity by favouring synaptic versus extrasynaptic NMDA RECEPTOR functionality in hippocampal neurons
Joshi P, **Gabrielli M**, Ponzoni L, Pelucchi S, Stravalaci M, Beeg M, Mazzitelli S, Braida D, Sala ME, Boda E, Buffo A, Gobbi M, Fabrizio G, Matteoli M, Marcello E, Verderio C
- J Neurosci, 20 April 2016, 36(16): 4624-4634; doi: 10.1523/JNEUROSCI.3588-15.2016. <http://www.ncbi.nlm.nih.gov/pubmed/27098703>
Sphingosine-1-phosphate (S1P) impacts presynaptic functions by regulating synapsin I localization in the presynaptic compartment
Riganti L, Antonucci F, **Gabrielli M**, Prada I, Giussani P, Viani P, Valtorta F, Menna E, Matteoli M, Verderio C
- EMBO Rep. 2015 Feb;16(2):213-20. doi: 10.15252/embr.201439668. <http://www.ncbi.nlm.nih.gov/pubmed/25568329>
Active endocannabinoids are secreted on extracellular membrane vesicles
Gabrielli M, Battista N, Riganti L, Prada I, Antonucci F, Cantone L, Matteoli M, Maccarrone M, Verderio C
- Front Mol Neurosci. 2014 May 27;7:49. doi: 10.3389/fnmol.2014.00049. <https://pubmed.ncbi.nlm.nih.gov/24904275>
LRRK2 kinase activity regulates synaptic vesicle trafficking and neurotransmitter release through modulation of LRRK2 macro-molecular complex
Cimaru MD, Marte A, Belluzzi E, Russo I, **Gabrielli M**, Longo F, Arcuri L, Murru L, Bubacco L, Matteoli M, Fedele E, Sala C, Passafaro M, Morari M, Greggio E, Onofri F, Piccoli G
- EMBO J. 2012 Jan 13;31(5):1231-40. doi: 10.1038/emboj.2011.489. <http://www.ncbi.nlm.nih.gov/pubmed/22246184>
Microvesicles released from microglia stimulate synaptic activity via enhanced sphingolipid metabolism
Antonucci F, Turola E, Riganti L, Caleo M, **Gabrielli M**, Perrotta C, Novellino L, Clementi E, Giussani P, Viani P, Matteoli M, Verderio C

Conference papers:

- Eur J Neurodegener Dis 2015, Vol.4, no.1-2, 17-22, https://www.researchgate.net/publication/305812332_Microglial_microvesicles_alter_excitation-inhibition_balance_in_the_brain
Microglial microvesicles alter excitation-inhibition balance in the brain
Gabrielli M and Verderio C
- SpringerPlus 4(Suppl 1):L29, June 2015, DOI: 10.1186/2193-1801-4-S1-L29
Active endocannabinoids are secreted on the surface of microglial microvesicles
Gabrielli M, Battista N, Riganti L, Prada I, Antonucci F, Cantone L, Lombardi M, Matteoli M, Maccarrone M and Verderio C
from ESN2015 Conference Molecular Mechanisms of Regulation in the Nervous System', June 14th-17th, 2015, Tartu (Estonia)
- Journal of Neurochemistry, 134, 41, 2015, August 2015
Pathogenic role of microglia-derived microvesicles in neuroinflammation and neurodegeneration: S18-02
Verderio C, Joshi P, Prada I, Lombardi M, **Gabrielli M**, Furlan R, Matteoli M
from 25th Biennial Meeting of the International Society for Neurochemistry
- GLIA Vol. 65, pp. E60-E61, 2017
Functional roles of extracellular vesicles derived from microglia with diverse activation states.
M Lombardi, I Prada, R Parolisi, E Bonfanti, A Iorio, P Joshi, **M Gabrielli**, A Buffo, P Gressens, M Fumagalli, C Verderio
from GLIA meeting 2017
- GLIA 63():E247-E248, AUG 2015
Glia-to-neuron shuttling of miR-146a via extracellular microvesicles modulates synaptotagmin I translocation in neurons: T08-33B
I.Prada, E.Turola, L.Amin, **M.Gabrielli**, F.Drago, J.Franck, G.Legname, R.Furlan, J.Vizioli, D.Cojoc, F.Peruzzi, C.Verderio
from GLIA meeting 2015

G – RESEARCH SUPPORT/GRANTS

FISM Senior Research Fellowship (cod. 1/10/2017-30/09/2019 (2 years) 2016/B/2)

From: FISM, Italian Multiple Sclerosis Foundation

To: **M. Gabrielli**

Title of the project: Microglia versus macrophage effects on oligodendrocyte precursor cells: role of extracellular vesicles

Amount: 68000 €/2 years

Reference to: Letter of funding assignment from FISM, dated February 20th 2017, protocol number 30/17/F14

Fondazione Veronesi Postdoctoral Fellowship 1/04/2017-30-09-2017 (6 months)

Fellowship

From: Fondazione Umberto Veronesi

To: **M. Gabrielli**

Title of the project: The role of extracellular vesicles secreted by microglia in early dysregulation of synaptic function in Alzheimer's disease

Amount: 15000 €/6 months

Reference to: Notice of award from Fondazione Umberto Veronesi, signed by the president and legal representative of the foundation Paolo Veronesi, dated December 5th 2016

PhD Fellowship from Ministero dell'Istruzione, dell'Università e della Ricerca 1/11/2012-31/10/2015 (3 years)

From: Ministero dell'Istruzione, dell'Università e della Ricerca/University of Milan

To: **M. Gabrielli**

Role: PhD student

Amount: 13.638,47€/year

Reference to: Self-certification of PhD title and PhD Fellowship auto-compiled by University of Milan administrative office and downloaded from SifaOnline/UNIMIA portal, dated 24/11/2016, number R1016783380006B208

H – CONTRIBUTION TO CONGRESSES

ORAL PRESENTATIONS:

- [“Extracellular vesicle miRNAs track cognitive symptoms in multiple sclerosis patients.](#)
M. Gabrielli, Visconte C, F Scaroni, M Serpente, M Huiskamp, E Scarpini, D Galimbert, B A. de Jong, C Fenoglio, C Verderio
At SINS National Congress, September 19th 2021 **Symposium (under 40)** “The emerging role of microRNAs in experimental and clinical multiple sclerosis”
- [“The amyloid cargo of extracellular vesicles released by microglia upon ATP stimulation propagates synaptic dysfunction in the mouse brain”](#)
Gabrielli M., Prada I., Joshi P., Falcicchia C., D'Arrigo G., Rutigliano G., Arancio O., Origlia N., Verderio C.
at The 2021 Purine Club, February 4-5, 2021, virtual meeting – **SELECTED SPEAKER**
- [“Microglia versus macrophage effects on oligodendrocyte precursor cells: role of extracellular vesicles”](#),
Gabrielli M., Lombardi M., Scaroni F., Bonfanti E., Filippello F., Fumagalli M., Verderio C.,
at FISM Fondazione Italiana Sclerosi Multipla meeting 2020, November 26-27, 2020, virtual meeting
- [“Microglia-derived extracellular vesicles propagate early synaptic dysfunction in Alzheimer's Disease by moving along neuronal processes”](#),
Gabrielli M
At ISEV Workshop “EV imaging in vivo, virtual meeting. September 10-11, 2020
- [“Role of extracellular vesicles released by ATP-activated microglia in early synaptic dysfunction in Alzheimer's Disease”](#),
M. Gabrielli, Joshi P., Rutigliano G., D'Arrigo G., Lombardi M., Arancio O., Origlia N. and Verderio C.
At Congresso Nazionale della Società Italiana di Farmacologia (SIF), November 20-23, 2019, Florence (Italy) – in **SELECTED SYMPOSIUM**
- [“Role of microglial extracellular vesicles in early synaptic dysfunction in Alzheimer's Disease”](#)
M. Gabrielli, P. Joshi, G. Rutigliano, G. D'Arrigo, M. Lombardi, O. Arancio, N. Origlia and C. Verderio
At IN-CNR Retreat 2018 held in Bergamo on September 26th-28th 2018 – **SELECTED SPEAKER**
- [‘Active endocannabinoids are released from microglial in association with extracellular vesicles’](#)
M. Gabrielli, N. Battista, L. Riganti, I. Prada, F. Antonucci, L. Cantone, M. Lombardi, M. Matteoli, M. Maccarrone, C. Verderio
At ‘International Astrocyte School 2016’ – April 10th-16th, 2016 - Bertinoro (Italy)
- [‘Active endocannabinoids are secreted on the surface of microglial microvesicles’](#)
M. Gabrielli, N. Battista, L. Riganti, I. Prada, F. Antonucci, L. Cantone, M. Lombardi, M. Matteoli, M. Maccarrone, C. Verderio
at ESN meeting 2015 “Conference Molecular Mechanisms of Regulation in the Nervous System”, June 14th-17th, 2015, Tartu (Estonia) - **SELECTED SPEAKER**
- [‘Active edocannabinoids are secreted on the surface of microglial microvesicles’](#) M. Gabrielli, N. Battista, L. Riganti, I. Prada, F. Antonucci, L. Cantone, M. Lombardi, M. Matteoli, M. Maccarrone, C. Verderio, at “National Meeting of PhD student in Neuroscience” organized by SINS and University of Napoli Federico II on February 26th 201 at Naples (Italy) - **SELECTED SPEAKER**
- [‘Microvesicles released from microglia stimulate excitatory synaptic activity via enhanced sphingolipid metabolism’](#)
M. Gabrielli, F. Antonucci, E. Turolo, L. Riganti, M. Caleo, C. Perrotta, E. Clementi, P. Giussani, P. Viani, M. Matteoli, C. Verderio
at ‘FISV 2012’, September 24th-27th, 2012, Rome (Italy) - **SELECTED SPEAKER**
- [‘Glial microvesicles can stimulate neuronal exocytosis via enhanced sphingolipid metabolism’](#)
F. Antonucci, M. Gabrielli, E. Turolo, L. Riganti, C. Perrotta, E. Clementi, P. Giussani, P. Viani, M. Matteoli, C. Verderio,
‘IV Monothematic Meeting of the Italian Society of Pharmacology: Immunity and Inflammation in brain disease: new pharmacological targets for innovative therapies’, November 14th, 2011, Milan (Italy)

POSTER PRESENTATIONS:

- [“Role of extracellular vesicles released by microglia in early synaptic dysfunction in Alzheimer’s Disease”](#)
M. Gabrielli, Joshi P., Rutigliano G., Lombardi M., Arancio O., Origlia N. and Verderio C.,
At BraYn - 2nd Brainstorming Research Assembly for Young Neuroscientists, November 14-16, 2019, Milano (Italy)
- [“Role of extracellular vesicles released by microglia in early synaptic dysfunction in Alzheimer’s Disease”](#)
M. Gabrielli, P. Joshi , G. Rutigliano, M. Lombardi, O. Arancio, N. Origlia and C. Verderio
At 2019 GLIA meeting, July 10-13 2019, Porto (Portugal)
- [“Microglia versus macrophage effects on oligodendrocyte precursor cells: role of extracellular vesicles”](#)
Gabrielli M., Lombardi M., Scaroni F., Bonfanti E., Filipello F., Fumagalli M., Verderio C.
At FISM Fondazione Italiana Sclerosi Multipla meeting 2019, May 29-31 2019, Rome (Italy)
- [“Role of microglial extracellular vesicles in early synaptic dysfunction in Alzheimer’s Disease”](#)
M. Gabrielli, P. Joshi , G. Rutigliano, M. Lombardi, O. Arancio, N. Origlia and C. Verderio
At The Brain Conference by FENS on Understanding and targeting Alzheimer’s disease, May 5-8 2019, Copenhagen (Denmark)
- [“Microglia versus macrophage effects on oligodendrocyte precursor cells: role of extracellular vesicles”](#)
Gabrielli M., Lombardi M., Scaroni F., Bonfanti E. Filipello F, Fumagalli M., Verderio C.,
At More than Neurons II edition, November 29th – December 1st 2018, Torino (Italy)
- [“Role of microglial extracellular vesicles in early synaptic dysfunction in Alzheimer’s Disease”](#)
M. Gabrielli, P. Joshi , G. Rutigliano, G. D’Arrigo, M. Lombardi, O. Arancio, N. Origlia and C. Verderio
At BBEVs The Biomarkers and Biogenesis of Extracellular Vesicles Workshop, August 29th-31st 2018, Padua (Italy)
- [“Microglia versus macrophage effects on oligodendrocyte precursor cells: role of extracellular vesicles”](#)
Gabrielli M., Lombardi M., Scaroni F., Bonfanti E. Filipello F, Fumagalli M., Verderio C.,
At FISM Fondazione Italiana Sclerosi Multipla meeting 2018, May 28th-30th 2018, Rome (Italy)
- [‘Microglial MVs modulate synaptic transmission in a target-specific way’](#)
Martina Gabrielli, Loredana Riganti, Natalia Battista, Ilaria Prada, Flavia Antonucci, Pooja Joshi, Michela Matteoli, Mauro Maccarrone, Claudia Verderio
At IN-CNR Retreat, September 10th-16th, 2016, Padua (Italy)
- [‘Active edocannabinoids are secreted on microglial microvesicle’](#)
Martina Gabrielli, Natalia Battista, Loredana Riganti, Ilaria Prada, Flavia Antonucci, Laura Cantone, Marta Lombardi, Michela Matteoli, Mauro Maccarrone, Claudia Verderio
At ‘International Winter Conference 2015’, April 7-11th, 2015, Solden (Austria)
- [‘Active endocannabinoids are secreted on extracellular membrane vesicles produced by microglia’](#)
M. Gabrielli, N. Battista, L. Riganti, I. Prada, F. Antonucci, M. Lombardi, M. Matteoli, M. Maccarrone, C. Verderio
At ‘FENS Forum 2014’, July 5-9th 2014, Milan (Italy)
- [‘Microvesicles released from microglia stimulate synaptic activity via enhanced sphingolipid metabolism’](#)
F. Antonucci, M. Gabrielli, E. Turolo, L. Riganti, P. Giussani, P. Viani, C. Perrotta, E. Clementi, M. Caleo, M. Matteoli, C. Verderio,
At ‘III° annual retreat of IN-CNR’, February 29th – March 3rd 2012, Bressanone (Italy)

I – REFEREE ACTIVITIES, TUTORING ACTIVITIES, SCIENCE COMMUNICATION, OTHER

- Referee for the evaluation of Scientific Project Proposals for FISM Call 2019 and 2020
- Referee for peer-reviewed journals(DNA and Cell Biol., Mol Neurobiol)
- I held two lessons on plasmidic DNA transfection to high school students on June 1st 2019 at Istituto di Istruzione Superiore Leonardo Da Vinci in Carate Brianza (MB, Italy)
- “Progetto Ricercatori in Classe” by Fondazione Umberto Veronesi: I held a lesson to high-school students on March 21st 2017 at Istituto Superiore Don Lorenzo Milani in Romano Di Lombardia (BG, Italy), concerning research and extracellular vesicles
- Tutoring to several Bachelor and Master students in the lab, included a US Bachelor student, visiting Columbia University for 2 months within the NIH Summer School program Step-Up
- Jump to the fens committee member: FENS young member committee for FENS Forum

L – PROFESSIONAL SOCIETIES

- ESN - European Society for Neurochemistry
- ISN - International Society for Neurochemistry
- FENS – Federation of European Neuroscience Society
- SIF – Italian Society of Pharmacology
- ISEV – International Society of Extracellular Vesicles
- Italian Purine Club

M – LANGUAGES

Mother tongue(s): Italian

Other language(s): **English: Excellent, written and spoken**

Le dichiarazioni rese nel presente curriculum sono da ritenersi rilasciate ai sensi degli artt. 46 e 47 del DPR n. 445/2000.

Briosco, 28/09/2021