

LUISELLA BOCCHIO-CHIAVETTO

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EDUCATION

UNIVERSITY OF MILAN

M.Sc. Degree in Chemistry (Organic/Biochemistry)

Thesis: *Italicize Title*

Advisor Prof. Bruno Rindone

Milan, Italy

July, 1994

UNIVERSITY OF MILAN

Post-graduate specialization in Toxicology

Thesis: *Italicize Title*

Advisor Prof. Massimo Gennarelli

Milan, Italy

March, 2001

AWARDS AND HONORS

- Poster Award at 12th European College of Neuro-Psychopharmacology Congress London 1999
- Poster Award at XII Congresso della Società Italiana di Neuropsicofarmacologia, 2000
- Poster Award at XIII Congresso della Società Italiana di Neuropsicofarmacologia 2002
- Poster Award at XV Congresso della Società Italiana di Neuropsicofarmacologia, 2006
- Poster Award at 9th World Congress of Biological Psychiatry, 2009, Paris
- Poster Awards at the International College of Affective Neuroscience Congress 2011

TEACHING EXPERIENCE

eCAMPUS UNIVERSITY

Novedrate (CO), Italy

From 2014/2015 to 2019/2020, Applied Biology course BIO/13 (6 cfu) for the bachelor's degree in Psychological Sciences and Techniques, eCampus University.

From 2014/2015 to 2015/2016, Applied Biology course BIO/13 (9 cfu) for the bachelor's degree in Sport and Physical sciences, eCampus University.

From 2016/2017 to 2017/2018, Biological and Biochemical Fundamentals BIO/13 (9 cfu) for the bachelor degree in Sport and Physical sciences, eCampus University.

From 2018/2019 to date, General Biology course BIO/13 (9 cfu) for the bachelor's degree in Biological sciences, eCampus University.

From 2015/2016 to date, Neurobiology of substance disorder (2 cfu) for the bachelor's degree in Psychological Sciences and Techniques, eCampus University.

From 2020/2021 Member of PhD Collegium "Sciences applied to wellness and sustainability", eCampus University

UNIVERSITY OF BRESCIA

Brescia (BS), Italy

Year 2012/2013 Pharmacogenetics course (2 CFU) master's degree in "Osteoporosis and bone metabolism diseases", University of Brescia, Italy.

Continuous Education in Medicine courses (ECM):

2009 Course: "Alzheimer disease and dementias. Diagnostic and therapeutical issues" Lesson: "Genetics and Pharmacogenetics"

2009 Course Transcranial magnetic stimulation in psychiatry: applications for diagnosis and therapies" Lesson: "Biological effects of transcranial magnetic stimulation"

2010 Course "Aggressivity and mental health: deeds and misdeeds" Lesson "Biological basis of aggressive behaviours in mental disorders"

Other institutional assignments at the eCampus University

From 2015/2016 to 2017/2018, Coordinator of the L-22 bachelor's degree in Sport and Physical sciences, eCampus University.

Year 2018/2019, Coordinator of the L-13 bachelor's degree in biological sciences, eCampus University.

From 2017, to date President of Quality Presidium, eCampus University.

TEACHING INTERESTS

General and Experimental Biology, Biological applications in medicine

PROFESSIONAL EXPERIENCE

ISTITUTO ENI DONEGANI

Novara (NO), Italy

1994-1995

Stage at Department of Organic chemistry: Interaction of formals with metal porphyrins. Scientific collaboration at the Department of Organic chemistry, University of Milan, Italy: Kinetic and spectroscopic studies on oxidative demolition reaction of lignin models.

EXPERIMENTAL STATION ON CELLULOSE

Milan (MI), Italy

1995-1996

Fellowship at Experimental Station on Cellulose of Milan, Italy: Isolation and characterization of raw materials for paper industry from annual plants.

IRCCS SAINT JOHN OF GOD-FATEBENEFRAELLI INSTITUTE

Brescia (BS), Italy

1997-1999

Fellowship at IRCCS San Giovanni di Dio-Fatebenefratelli of Brescia, Italy: Involvement of neurotransmitter and immune systems in the aetiology of psychosis.

2000-2005

Researcher at IRCCS Centro S. Giovanni di Dio Fatebenefratelli of Brescia, Italy: Biochemical and genetic studies on mental disorders

From 2006 to May 2014

Head of the Neuropsychopharmacology Unit at IRCCS Centro S. Giovanni di Dio Fatebenefratelli of Brescia, Italy: Molecular studies for the identification of biomarkers in mental disorders

ECAMPUS UNIVERSITY

Novedrate (CO), Italy

May 2014-2021

Researcher and then Associate Professor of Experimental Biology at Faculty of Psychology, eCampus University, Novedrate (Como), Italy; Research collaborator for the Preclinical Research Line at the Genetic Unit, IRCCS Centro S. Giovanni di Dio Fatebenefratelli of Brescia, Italy

From March 2021

Full Professor of Experimental Biology at Faculty of Psychology, eCampus University, Novedrate (Como), Italy; Research collaborator for the Psychiatric Unit, IRCCS Centro S. Giovanni di Dio Fatebenefratelli of Brescia, Italy

TECHNICAL SKILLS/ SCIENTIFIC ACTIVITY

During her biomedical research activity, she has participated, also as principal investigator, to several studies investigating susceptibility genes for psychiatric disorders and molecular markers associated to diagnosis and response to treatment.

Her main research fields have been the role of immune system modulators and neurotrophic factors in the pathogenesis and in the action mechanism of pharmacological and non-pharmacological therapies of schizophrenia, major depression and dementias. More recently her studies are focused on the possible involvement of microRNAs and metabolic/immune alterations in unipolar and bipolar depression and first episode psychosis, also for the identification of biomarkers associated to pharmacological and psychotherapeutic treatments' efficacy.

She is co-author of 80 full papers on peer reviewed journals and one book chapter.

h index=37 (Scopus)

During her research activity, she has acquired a significant experience in the management of research groups, composed by both basic researchers and clinicians, that allowed her to acquire good skills in collaborative works. She has been the scientific coordinator of several projects of Ricerca Corrente and Ricerca Finalizzata (as Head of Operative Unit) of the Italian Ministry of Health and Private Foundations grants.

Other relevant information

Associate editor for the journals Scientific Report, Nature Publishing Group.

Review Editor for Frontiers in Genetics

Editorial Board Member of "BMC Psychiatry", (Psychiatric molecular genetics), Springer Nature

Referee for grant application programs: ANR Agence Nationale de la Recherche, BSF United States – Israel binational Science Foundation, Alzheimer's Society UK; MUR Italian Ministry of University and Research.

Referee for international scientific journals: Nature Medicine, Neuropsychopharmacology, Acta psychiatrica Scandinavica, Biological Psychiatry, Translational Psychiatry, Progress in Neuropsychopharmacology and Biological Psychiatry, Current Psychopharmacology, European Archives of Psychiatry and Clinical Neuroscience, European Psychiatry, Human Psychopharmacology: Clinical and Experimental, International Journal of Neuropsychopharmacology, Journal of Psychiatric Research, Journal of Affective Disorders, Neurobiology of Aging, Current Alzheimer Research, Psychiatric Research, World Journal of Biological Psychiatry, Schizophrenia Research, Psychoneuroendocrinology, Brain Stimulation, Experimental Brain Research and others

Funded research projects:

- scientific coordinator of several projects of Italian Ministry of Health (IMH) Ricerca Corrente from 2000 to 2014
- scientific coordinator of Operative Unit in grants for competitive projects funded by the Italian Ministry of Health (IMH) (Ricerca Finalizzata).
- researcher participant in the European Commission Framework project "Genome-based therapeutic drugs for depression (GENDEP)" (LSHB-CT-2003-503428) CR10 IRCCS-FBF
- Principal Investigator for IRCCS FBF (partner institution) in the project "The regulation of neuroplasticity in the response to therapeutic drugs for mood disorders. The role of micro RNAs" funded by Cariplo Foundation call 2009. Coordinating Institution Centre of Neuropharmacology, University of Milan, Italy.
- IMH RF2007 project "Innovative strategies for depression treatment: novel pharmacological targets and preclinical studies for the personalization of therapy" Coordinator Prof. Massimo Gennarelli, IRCCS FBF, Italy. She is the Scientific Referent of the Research Unit 5.
- IMH RF2007 Strategic project "GET UP (Genetics, Endophenotypes and Treatment: Understanding early Psychosis) Coordinator Prof. Mirella Ruggeri, Dept of Psychiatry, University of Verona, Italy. She is the Sub-Coordinator for biological studies of the whole project and she is the Scientific Referent of the Research Unit 2.
- Participant in the project "Biomarkers for tailoring therapies in mood disorders" funded by the Lombardy Region call 2010, Coordinator Prof. Massimo Gennarelli, University of Brescia, Italy.
- Participant in the multicenter study "The Alzheimer's Association external quality control program for CSF biomarkers." that involves 60 laboratories in the EU Coordinated by Prof. Kay Blennow, Goteborgs Universitet, Sahlgrenska Akademini, Sweden.
- Participant in the European Commission multicenter study "IMI-PHARMACOG" Coordinator WP5 Dr. G Frisoni, IRCCS Fatebenefratelli, Brescia, Italy.
- Participant in the IMH Project RF2011 GR "Neuroimaging and clinical markers of change in borderline personality disorder after metacognitive interpersonal therapy PI Dr. Roberta Rossi
- Participant in the IMH Project RF2013 "Neuroplasticity and Alzheimer's Disease integrated approach to identify biological and neurophysiological markers" PI Prof. Carlo Miniussi
- coPI in the IMH RF2016 Project "Towards precision medicine in psychiatry: clinical validation of a combinatorial pharmacogenomic approach". PI Prof. Massimo Gennarelli

PUBLICATIONS

L. Bocchio Chiavetto, G. Guglielmetti, C. Querci, M. Ricci. Oxidation of isosafrol by sodium hypochlorite catalysed by manganese porphyrins, unusual competition between epoxidation and O-dealkylation. *Tetrahedron Letters*, 37, 1091-94, 1996.

E. Bolzacchini, **L. Bocchio Chiavetto**, C. Canevali, F. Morazzoni, M. Orlandi, B. Rindone. Oxidation of propenoidic phenols catalysed by N,N'-ethylenebis(salicylideneiminato) cobalt(II) [cosalen]: reactivity and spectroscopic studies. *Journal of Molecular Catalysis A Chemical*, 112, 347-351, 1996.

From 2000 in biomedical research

Maes M., **Bocchio Chiavetto L.**, Bignotti S., Tura G.B., Pioli R., Boin F., Kenis G., Bosmans E., de Jongh R., Lin A., Racagni G., Altamura C.A. Effects of atypical antipsychotics on the inflammatory response system in schizophrenic patients resistant to treatment with typical neuroleptics. *Eur Neuropsychopharmacol*, 10, 119-124, 2000.

D. Tardito, G.B. Tura, **L. Bocchio**, S. Bignotti, R. Pioli, G. Racagni, J. Perez. Abnormal levels of cAMP-dependent protein kinase regulatory subunits in platelets from schizophrenic patients, *Neuropsychopharmacology*, 23, 216-219, 2000.

Maes M., Delanghe J., **Bocchio Chiavetto L.**, Bignotti S., Tura G.B., Pioli R., Zanardini R., Altamura C.A. Haptoglobin polymorphism and schizophrenia: genetic variation on chromosome 16. *Psychiatry Res.* 104, 1-9, 2001.

Ventriglia M., **Bocchio Chiavetto L.**, Benussi L., Binetti G., Zanetti O., Riva M.A., Gennarelli M. Association between the BDNF 196 A/G polymorphism and sporadic Alzheimer's disease. *Mol Psychiatry* 7, 136-7, 2002. Q1 cit 193 (wos)

Maes M., **Bocchio Chiavetto L.**, Bignotti S., Tura G.B., Pioli R., Boin F., Kenis G., Bosmans E., de Jongh R., Altamura C.A. Increased serum interleukin-8 and interleukin-10 in schizophrenic patients resistant to treatment with neuroleptics and the stimulatory effects of clozapine on serum leukemia inhibitory factor receptor. *Schizophr Res.* 54, 281-91. 2002.

Bocchio Chiavetto L., Boin F., Zanardini R., Popoli M., Michelato A., Bignotti S., Tura G.B., Gennarelli M. Association between promoter polymorphic haplotypes of interleukin-10 gene and schizophrenia. *Biol Psychiatry* 51, 480-4, 2002. Q1 cit 70 (wos) cit 79 (scopus)

Ventriglia M, **Bocchio Chiavetto L**, Bonvicini C, Tura GB, Bignotti S, Racagni G, Gennarelli M. Allelic variation in the human prodynorphin gene promoter and schizophrenia. *Neuropsychobiology* 46, 17-21, 2002.

Catalano M, Lorenzi C, **Bocchio L**, Racagni G. No occurrence of the glutamate transporter EAAT2 A206G polymorphism in schizophrenic subjects. *Mol Psychiatry* 7, 671-2, 2002.

R. Zanardini, **L. Bocchio Chiavetto**, C. Scassellati, C. Bonvicini, G.B. Tura, G. Rossi, J. Perez, M. Gennarelli. Association between IL-1b -511C/T and IL-1RA (86bp)n repeats polymorphisms and schizophrenia. *Journal of Psychiatry Research* 37, 457-62, 2003.

Altamura AC, Bassetti R, **Bocchio L**, Santini A, Mundo E. Season of birth and inflammatory response system in schizophrenia. *Prog Neuropsychopharmacol Biol Psychiatry* 27, 879-80, 2003.

Scassellati C, Zanardini R, Squitti R, **Bocchio-Chiavetto L**, Bonvicini C, Binetti G, Zanetti O, Cassetta E, Gennarelli M. Promoter haplotypes of interleukin-10 gene and sporadic Alzheimer's disease. *Neurosci Lett.* 356, 119-22, 2004.

Scassellati C., Bonvicini C., Perez J., **Bocchio- Chiavetto L.**, Tura G.B., Rossi G., Racagni G., Gennarelli M. Association study of -1727 A/T, -50 C/T and (CAA)n repeat GSK-3 β gene polymorphisms with schizophrenia. *Neuropsychobiology* 50, 16-20, 2004.

Ventriglia M, **Bocchio-Chiavetto L.**, Scassellati C., Squitti R., Binetti G., Ghidoni R., Rossini PM., Gennarelli M. Lack of association between MnSOD gene polymorphism and sporadic Alzheimer's Disease. *Aging Clinical and Experimental Research* 2005;17(6):445.

R Zanardini, A Gazzoli, M Ventriglia, J Perez, S Bignotti, PM Rossini, M Gennarelli and **L Bocchio-Chiavetto**. Effect of repetitive transcranial magnetic stimulation on serum brain derived neurotrophic factor in drug resistant depressed patients. *J Affective Disorders* 91(1):83-6, 2006. Q1 cit 99 (wos) cit 110 (scopus)

N Filippini, C Scassellati, M Boccardi, M Pievani, C Testa, **L Bocchio-Chiavetto**, G B. Frisoni, M Gennarelli. Influence of serotonin receptor 2A His452Tyr polymorphism on brain temporal structures: a volumetric MR study. *European Journal of Human Genetics. Eur J Hum Genet* 14(4):443-9, 2006.

L Bocchio-Chiavetto, R Zanardini, M Bortolomasi, M Abate, M Segala, M Giacomuzzi, MA Riva, E Marchina, P Pasqualetti, J Perez, M Gennarelli. Electroconvulsive Therapy (ECT) increases serum Brain Derived Neurotrophic Factor (BDNF) in drug resistant depressed patients. *Eur Neuropsychopharmacology* 2006;16(8):620-4. Q1 cit 121 (wos)

Sacchetti E, **Bocchio-Chiavetto L**, Valsecchi P, Scassellati C, Pasqualetti P, Bonvicini C, Corsini P, Rossi G, Cesana BM, Barlati S, Gennarelli M. -G308A tumor necrosis factor alpha functional polymorphism and schizophrenia risk: Meta-analysis plus association study. *Brain Behav Immun.* 2007;21(4):450-7. Q1 cit 38 (wos)

A Alberici, **L Bocchio-Chiavetto**, C Geroldi, R Zanardini, C Bonomini, G Bugari, C Iacobello, L Caimi, M Gennarelli, O Zanetti, A Valerio, E Nisoli, C Agosti, B Borroni, A Padovani. High serum

leptin levels in female FTLN patients. *Journal of Neurology, Neurosurgery & Psychiatry* 2008;79(6):712-715.

M Boccardi, C Scassellati, R Ghidoni, C Testa, L Benussi, M Bonetti, **L Bocchio-Chiavetto**, M Gennarelli, G Binetti, G B. Frisoni, MD. Effect of the XbaI polymorphism of estrogen receptor alpha on postmenopausal gray matter. *Neuroscience letters* 2008;434(3):304-9.

L Bocchio-Chiavetto, C Miniussi, R Zanardini, A Gazzoli, S Bignotti, C Specchia, M Gennarelli. 5-HTTLPR and BDNF Val66Met polymorphisms and response to rTMS treatment in drug resistant depression. *Neurosci Lett* 2008;437(2):130-134. Q3 cit 46

Ventriglia M, Zanardini R, Pedrini L, Placentino A, Nielsen MG, Gennarelli M, **Bocchio-Chiavetto L**. VEGF serum levels in depressed patients during SSRI antidepressant treatment. *Prog Neuropsychopharmacol Biol Psychiatry*. 2009;33(1):146-9.

Frisoni GB, Prestia A, Zanetti O, Galluzzi S, Romano M, Cotelli M, Gennarelli M, Binetti G, **Bocchio L**, Paghera B, Amicucci G, Bonetti M, Benussi L, Ghidoni R, Geroldi C. Markers of Alzheimer's disease in a population attending a memory clinic. *Alzheimers Dement*. 2009;5(4):307-17.

Maina G, Rosso G, Zanardini R, Bogetto F, Gennarelli M, **Bocchio-Chiavetto L**. Serum levels of brain-derived neurotrophic factor in drug-naïve obsessive-compulsive patients: A case-control study. *J Affect Disord* 2010;122:174-178. Q1 cit 55 (wos) cit 58 (scopus)

A Cattaneo*, **L Bocchio-Chiavetto***, R Zanardini, E Milanese, A Placentino, M Gennarelli. Reduced peripheral brain-derived neurotrophic factor mRNA levels are normalized by antidepressant treatment. *International Journal of Neuropsychopharmacology* 2010;13:103-8.

*These authors have contributed equally

Cattaneo A, **Bocchio-Chiavetto L**, Zanardini R, Marchina E, Bellotti D, Milanese E, Moraschi S, Calabrese F, Barlati S, Riva MA, Gennarelli M. BDNF Val66Met polymorphism and protein levels in amniotic fluid. *BMC Neurosci* 2010;11:16.

L Bocchio-Chiavetto, V Bagnardi, R Zanardini, R Molteni, M G Nielsen, A Placentino, C Giovannini, L Rilloso, M Ventriglia, M A. Riva, M Gennarelli. Serum and plasma BDNF levels in major depression: a replication study and meta-analyses. *World Journal of Biological Psychiatry*. 2010;11:763-73. Q1 cit 238 (wos) cit 257 (scopus)

Minelli, R. Zanardini, C. Bonvicini, R. Sartori, L. Pedrini, M. Gennarelli, **L. Bocchio-Chiavetto**. BDNF serum levels, but not BDNF Val66Met genotype, are correlated with personality traits in healthy subjects. *Eur Arch Psychiatry Clin Neurosci*. 2011 Aug;261(5):323-9.

R. Zanardini, A. Fontana, R. Pagano, E. Mazzaro, F. Bergamasco, G. Romagnosi, M. Gennarelli, **L. Bocchio-Chiavetto**. Alterations of brain-derived neurotrophic factor serum levels in patients with alcohol dependence. *Alcoholism: Clinical and Experimental Research*. 2011 Aug;35(8):1529-33.

Minelli, R. Zanardini, M. Abate, M. Bortolomasi, M. Gennarelli, L. Bocchio-Chiavetto. Vascular Endothelial Growth Factor (VEGF) serum concentration during Electroconvulsive Therapy (ECT) in treatment resistant depressed patients. *Prog Neuropsychopharmacol Biol Psychiatry*. 2011 35:1322-5.

Niklas Mattsson, Ulf Andreasson, Staffan Persson, Hiroyuki Arai, Sat Dev Batish, Sergio Bernardini, **Luisella Bocchio-Chiavetto**, ..and Kaj Blennow. The Alzheimer's Association external quality control program for CSF biomarkers. *Alzheimers Dement*. 2011 Jul;7(4):386-395.

Paternicò D, Drago V, **Bocchio-Chiavetto L**, Zanardini R, Frisoni GB. Alzheimer disease CSF markers levels across the life-span in a cognitively healthy adult cohort. *Alzheimers Dement*. 2012 Nov;8(6):520-7.

Albertini, L. Benussi, A. Paterlini, M. Glionna, A. Prestia, **L. Bocchio-Chiavetto**, G. Amicucci, S. Galluzzi, A. Adorni, C. Geroldi, G. Binetti, GB. Frisoni, R. Ghidoni. Distinct cerebrospinal fluid amyloid-beta peptide signatures in cognitive decline associated with Alzheimer's Disease and schizophrenia. *Electrophoresis*. 2012 Dec;33(24):3738-44.

L. Bocchio-Chiavetto, E. Maffioletti, P. Bettinsoli, C. Giovannini, S. Bignotti, D. Tardito, D. Corrada, L. Milanese and M. Gennarelli. Blood microRNA changes in depressed patients during antidepressant treatment. *Eur Neuropsychopharmacol*. 2013 Jul;23(7):602-11.

S. Galluzzi, C. Geroldi, G. Amicucci, **L. Bocchio-Chiavetto**, M. Bonetti, C. Bonvicini, M. Cotelli, R. Ghidoni, B. Paghera, O. Zanetti, G. B. Frisoni and Translational Outpatient Memory Clinic Working Group. Supporting evidence for using biomarkers in the diagnosis of MCI due to AD. *J Neurol*. 2013 Feb;260(2):640-50.

L. Bocchio Chiavetto, J. Teo, B. Cheeran. Molecular mechanisms of brain stimulation. (Chapter 11). A reference book for transcranial stimulation. Carlo Miniussi, Walter Paulus, Paolo Maria Rossini. Taylor & Francis ed. 2013.

Scassellati C, Zanardini R, Tiberti A, Pezzani M, Valenti V, Effedri P, Filippini E, Conte S, Ottolini A, Gennarelli M, **Bocchio-Chiavetto L**. Serum brain-derived neurotrophic factor (BDNF) levels in attention deficit-hyperactivity disorder (ADHD). *Eur Child Adolesc Psychiatry*. 2014, 23(3), pp. 173-177.

Mariacarla Ventriglia, Roberta Zanardini, Cristina Bonomini, Orazio Zanetti, Daniele Volpe, Patrizio Pasqualetti, Massimo Gennarelli, and **Luisella Bocchio-Chiavetto**. Serum Brain-Derived Neurotrophic Factor Levels in Different Neurological Diseases. *BioMed Research International* 2013, Article ID 901082, 7 pages

Alessandra Minelli, Elisabetta Maffioletti, Marco Bortolomasi, Andreas Conca, Roberta Zanardini, Luciana Rillosi, Maria Abate, Mario Giacomuzzi, Giuseppe Maina, Massimo Gennarelli, **Luisella Bocchio-Chiavetto**. Association between baseline serum Vascular Endothelial Growth Factor (VEGF) levels and response to electroconvulsive therapy. *Acta Psychiatrica Scandinavica* 2013 Aug 20. doi: 10.1111/acps.12187.

Elisabetta Maffioletti, Daniela Tardito, Massimo Gennarelli, **Luisella Bocchio-Chiavetto**. Micro spies from the brain to the periphery: new clues from studies on microRNAs in neuropsychiatric disorders. *Frontiers in Cellular Neuroscience*. 2014 Mar 11;8:75.

Maffioletti E, Zanardini R, Gennarelli M, **Bocchio-Chiavetto L**. Influence of clotting duration on brain-derived neurotrophic factor (BDNF) dosage in serum. *Biotechniques*. 2014;57(3):111-4.

Agosta F, Dalla Libera D, Spinelli EG, Finardi A, Canu E, Bergami A, **Bocchio Chiavetto L**, Baronio M, Comi G, Martino G, Matteoli M, Magnani G, Verderio C, Furlan R. Myeloid microvesicles in cerebrospinal fluid are associated with myelin damage and neuronal loss in mild cognitive impairment and Alzheimer disease. *Ann Neurol*. 2014 Dec;76(6):813-25.

Nadia Cattane, Alessandra Minelli, Elena Milanese, Carlo Maj, Stefano Bignotti, Marco Bortolomasi, **Luisella Bocchio Chiavetto**, Massimo Gennarelli. Altered gene expression in schizophrenia: findings from transcriptional signatures in fibroblasts and blood. *PLoS One*. 2015. 10(2):e0116686. doi: 10.1371/journal.pone.0116686.

Annamaria Cattaneo, Flavia Macchi, Giona Plazzotta, Begni Veronica, **Luisella Bocchio-Chiavetto**, Marco Andrea Riva, Carmine Maria Pariante. Inflammation and neuronal plasticity: a link between childhood trauma and depression pathogenesis. *Front Cell Neurosci*. 2015 Mar 31;9:40. doi:10.3389/fncel.2015.00040.

Nicola Lopizzo, **Luisella Bocchio Chiavetto**, Nadia Cattaneo, Giona Plazzotta, Frank Tarazi, Carmine M Pariante, Marco A. Riva, Annamaria Cattaneo. Gene-environment interaction in Major Depression: focus on experience-dependent biological systems. *Frontiers in Psychiatry*. 2015 May 8;6:68.

Niels Kruse, Staffan Persson; Daniel Alcolea; Justyna M Bahl; Ines Baldeiras; Elisabetta Capello; Davide Chiasserini; **Luisella Bocchio Chiavetto**; Andreja Emersic; Sebastiaan Engelborghs; Erden Eren; Tormod Fladby; Giovanni Frisoni; María-Salud García-Ayllón; Sermin Genc; Olymbia Gkatzima; Niels H Heegaard; André M Janeiro; Branislav Kováčech; Bea Kuiperij; Maria J Leitão; Alberto Lleó; Madalena Martins; Mafalda Matos; Hanne M Mollergard; Flavio Nobili; Annika Öhrfelt; Lucilla Parnetti; Catarina Resende de Oliveira; Uros Rot; Javier Sáez-Valero; Hanne Struyfs; Julia T Tanassi; Peggy Taylor; Magda Tsolaki; Eugeen Vanmechelen; Marcel M Verbeek; Norbert Zilka; Kaj Blennow; Henrik Zetterberg; Brit Mollenhauer. Validation of a quantitative cerebrospinal fluid alpha-synuclein assay in a European-wide interlaboratory study. *Neurobiology of Aging* 2015 Sep;36(9):2587-96.

Rosso G, Cattaneo A, Zanardini R, Gennarelli M, Maina G, **Bocchio-Chiavetto L**. Glucose metabolism alterations in patients with bipolar disorder. *J Affect Disord*. 2015 Sep 15;184:293-8.

Toledo JB, Zetterberg H, van Harten AC, Glodzik L, Martinez-Lage P, **Bocchio-Chiavetto L**, Rami L, Hansson O, Sperling R, Engelborghs S, Osorio RS, Vanderstichele H, Vandijck M, Hampel H, Tepl S, Moghekar A, Albert M, Hu WT, Monge Argilés JA, Gorostidi A, Teunissen CE, De Deyn PP, Hyman BT, Molinuevo JL, Frisoni GB, Linazasoro G, de Leon MJ, van der Flier WM, Scheltens P, Blennow K, Shaw LM, Trojanowski JQ; Alzheimer's Disease Neuroimaging Initiative. Alzheimer's disease cerebrospinal fluid biomarker in cognitively normal subjects. *Brain*. 2015 Sep;138(Pt 9):2701-15.

Elisabetta Maffioletti, Annamaria Cattaneo, Gianluca Rosso, Giuseppe Maina, Carlo Maj, Massimo Gennarelli, Daniela Tardito, **Luisella Bocchio-Chiavetto**. Peripheral whole blood microRNA alterations in major depression and bipolar disorder. *Journal of Affective Disorders* (2016): 250–258. doi: 10.1016/j.jad.2016.04.021

Cattaneo A, Ferrari C, Uher R, **Bocchio-Chiavetto L**, Riva MA; MRC ImmunoPsychiatry Consortium, Pariante CM. Absolute measurements of Macrophage Migration Inhibitory Factor and Interleukin-1 β mRNA levels accurately predict treatment response in depressed patients. *Int J Neuropsychopharmacol*. 2016, 19(10).

Gianluca Rosso, Roberta Zanardini, Daniela Francesca Chiodelli, Clarissa Ferrari, Massimo Gennarelli, **Luisella Bocchio-Chiavetto**. Serum levels of Insulin-like Growth Factor 1 (IGF-1) and Obsessive Compulsive Disorder: a case-control study. *Neuropsychobiology* 2016, 74:15-21.

Milanesi E, Maj C, **Bocchio-Chiavetto L**, Maffioletti E. Nanomedicine in Psychiatry: New Therapeutic Opportunities from Research on Small RNAs. *Drug Dev Res*. 2016 Dec;77(8):453-457.

Brambilla M, Manenti R, de Girolamo G, Adenzato M, **Bocchio-Chiavetto L**, Cotelli M. Effects of Intranasal Oxytocin on Long-Term Memory in Healthy Humans: A Systematic Review. *Drug Dev Res*. 2016 Dec;77(8):479-488.

Milanesi E, Zanardini R, Rosso G, Maina G, Barbon A, Mora C, Minelli A, Gennarelli M, **Bocchio-Chiavetto L**. Insulin-like Growth Factor Binding Protein 2 in bipolar disorder: an expression study in peripheral tissues. *World J Biol Psychiatry*. 2017 Jan 16:1-23. doi: 10.1080/15622975.2017.1282172

Maffioletti E, Salvi A, Conde I, Maj C, Gennarelli M, De Petro G, **Bocchio-Chiavetto L**. Study of the in vitro modulation exerted by the antidepressant drug escitalopram on the expression of candidate microRNAs and their target genes. *Mol Cell Neurosci*. 2017 Dec 85:220-225.

Bocchio-Chiavetto L, Zanardini R, Tosato S, Ventriglia M, Ferrari C, Bonetto C, Lasalvia A, Giubilini F, Fioritti A, Pileggi F, Pratelli M, Pavanati M, Favaro A, De Girolamo G, Frisoni GB, Ruggeri M, Gennarelli M; GET UP Group. Immune and metabolic alterations in first episode

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ORAL PRESENTATIONS (MOST RECENT)

-9th World Congress of Biological Psychiatry 28 June-2 July 2009 Paris, France. Presentation title: "Decreased BDNF serum levels in drug naïve non-depressed obsessive compulsive patients".

-Seminar "MicroRNAs: new actors in the pathogenesis and the treatment of mood disorders?" 20 March 2015 European Frontiers in Neuropsychopharmacology, International PhD program, University of Catania (Italy).

-Invited chair and speaker symposium "MicroRNAs: leading actors in the scenario of mood disorders aetiology and treatment" European Congress in Neuropsychopharmacology (ECNP), Amsterdam, Nederland, 29 August-3 September 2015.

- IEPA Congress Early Intervention in Mental Health, 19-22 October 2016 Milan. Presentation title: “Molecular Markers of Psychosis onset: Immune and Metabolic Alterations in First Episode Psychosis (FEP) Patients”, Milan, Italy, 19-22 October 2016.
- SINPF Congress 2020 Presentation title:” Meccanismi epigenetici nel disturbo bipolare e ricadute sul trattamento farmacologico”, Milan, Italy 29-31 January 2020.
- Seminar “Molecular markers for diagnosis and treatment improvement in psychiatric diseases” Autumn seminars “The long and winding road from neuroscience to psychiatry and viceversa”. PhD course in Neuroscience, Psychiatry and Psychological Sciences and Movement, University of Verona, Italy 22 September 2020.

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