ALESSANDRO IERACI

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EDUCATION

Ph.D. degree in Molecular Medicine, June 2006, University of Piemonte Orientale "*A. Avogadro*", Novara, Italy. Title: HGF/Met in the cerebellar development

Master's degree in Biological Sciences, March 1997, University of Turin, Italy.

AWARDS AND HONORS

National qualification as Associate Professor of Physiology, 2022

National qualification as Associate Professor of Cellular and Experimental Biology, 2017-present

Fellowship for collaboration to research activities; University of Milan,2011-2017

Research Fellowship DeWitt Wallace - Reader's Digest, 2002-2006

Telethon short-term fellowship, 2002

EMBO short-term fellowship. 2001

PhD fellowship "Lega Italiana Contro i Tumori", 1997-2001

TEACHING EXPERIENCE

Associate Professor, Course: *Fundamentals of Biology and Chemistry*; Bachelor's Degree; **eCampus University** 2022-present

Assistant Professor, Course*: Basic Information On Laboratory Safety (chemistry, microbiology and biology)*; Bachelor's Degree; Pharmaceutical Sciences, **University of Milan**; Winter 2022

Adjunct Professor, Course: Clinical Biochemistry; Bachelors's Degree, **eCampus University.** 2018-2022

Guest Lecturer; Course: *Molecular and Cellular Pharmacology*; Bachelor's Degree; Dept. of Pharmacological and Biomolecular Sciences, **University of Milan**; 2018

Guest Lecturer; Course: *Pharmacogenetics and Epigenetics in Toxicology*; Master's Degree; Dept. of Pharmacological and Biomolecular Sciences; **University of Milan**; 2018

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Guest Lecturer; Course: *Applied Pharmacology*; Master's Degree; Dept. of Pharmacological and Biomolecular Sciences; **University of Milan**. 2017

Guest Lecturer; Course: *Anatomical-Physiological Bases of the Cognitive Processes*; Master's Degree; Dept. of Pharmacological and Biomolecular Sciences; **University of Milan**. 2017

Guest Lecturer, Course: *Laboratory of Biotechnology Applied to Pharmacology*; Bachelor's Degree; Dept. of Pharmacological and Biomolecular Sciences; **University of Milan**. 2017

Guest Lecturer; Course: *Biotechnology*; Bachelor's Degree; Dept. of Anatomy, pharmacology and Biomolecular Sciences; **University of Milan**. 2016-18

Guest Lecturer; Course: *Biochemistry*; Master's Degree; Dept. of Anaomy., Pharmacology and Forensic Medicine, **University of Turin**. 2000

TEACHING INTERESTS

My teaching interests are inextricably linked to my research ambitions. I firmly believe that research and teaching should always work closely together and that these activities complement each other in a researcher's career. My experiences in teaching and as a research mentor have enabled me to improve my personal teaching style and understanding of effective teaching methods. I am committed to my role as a primary resource and mentor for each of my students, but I also encourage my students to engage in collegial learning.

My main teaching interests are in laboratory-based research, including animal models of neurodevelopmental disorders, behavioral studies, histochemistry and molecular biology. However, I also enjoy teaching courses outside my immediate area of expertise as long as they align with my broader scientific training and intellectual interests. Finally, it is important to know that I am not learning less than my students. I regularly seek feedback from students and colleagues on my teaching in order to improve my teaching methods and make them more effective.

PROFESSIONAL EXPERIENCE

Researcher **Pharmacological Research Institute Mario Negri**, IRCCS, Milan, Italy 2024-present
Main projects Assessing the role of gene-environment interaction in brain disorders. Development animal models of neurodegenerative and neurodevelopmental disorders.
Responsibilities Project coordinator. Writing papers, grant applications and request for authorizations to utilize animals. Supervising and mentoring students.

Associate Professor of Cellular and Experimental Biology ***eCampus University***, Novedrate (CO) Italy. 2022-present
Responsibilities: Teaching

Assistant Professor of Physiology ***University of Milan***, Italy. 2022
Responsibilities: Teaching

Adjunct Professor of Clinical Biochemistry; **eCampus University**, Novedrate, Como, Italy. 2018-2022
Responsibilities: Teaching

Senior research scientist; Dept. of Pharmacological and Biomolecular Sciences, ***University of Milan***, Italy. 2011_2022
Main projects To study the role of polymorphisms in moderating the behavioral/ morphological/ molecular responses induced by environmental challenges. Development animal models of psychiatric disorders. Set up *in vitro* models to screening drug compounds and to study molecular mechanisms.
Responsibilities Project coordinator. Writing papers, grant applications and request for authorizations to utilize animals. Knock-in mouse colonies management. Supervising and mentoring students.

Research scientist; Dept. of Preclinical Research, ***Newron Pharmaceuticals SpA***, Bresso, (MI) Italy. 2007–2011
Main projects Development new drug compounds for neurodegenerative and psychiatric disorders. Setting up animal models of psychiatric and cognitive disorders. Pharmacokinetic studies.
Responsibilities: Experimental design, technicians management, scientific reporting. Establishing and managing collaborations with academic centers and CRO. Critical evaluation of external projects in pre-clinical stage for potential acquisition.

Postdoctoral fellow; ***San Raffaele Telethon Institute for Gene Therapy***, Milan, Italy. 2006–2007 Laboratory of Dr. Angela Gritti.
Main projects Investigate the role of inflammation in a mouse model of leukodystrophies.
Responsibilities Designing and conducting experiments, collecting and analyze data, writing paper. Supervising and mentoring students.

Postdoctoral fellow; Dept. of Psychiatry ***Weill Medical College of Cornell University,*** New York, NY, USA. 2002-2006 Laboratory of Prof. Daniel G. Herrera
Main projects To assess the neuroprotective effect of antioxidant compounds against alcohol toxicity in cellular ad animal models. Set up *in vitro* and *in vivo* models of alcohol-induced neurodegeneration. Contributed to characterize the function of the human BDNF Val66Met polymorphism both *in vitro* and *in vivo* models.
Responsibilities Designing and conducting experiments, collecting and analyze data, writing papers and grant applications. Supervising students.

Visiting student; ***INSERM*** Unit 382, Development and Pathology of the Spinal Motoneuron; Marseille; France. 2001 Laboratory of Dr. Flavio Maina.
Main project To study the role of Met receptor in protecting primary embryonic hepatocyte cultures from apoptosis.

Ph.D. student, Dept. of Anat., Pharmac. and Forensic Med., ***University of Turin***, Turin, Italy. 1997-2001 Laboratory of Prof. Carola Ponzetto.

Main project To investigate the role of Met receptor in cerebellar and muscle development using knock-in mice.

Intership Dept. of Animal Biology, ***University of Turin***, Turin, Italy. 1995-1997 Laboratory of Prof. Isabelle Perroteau.
Main project To study the localisation of ErbB3 and ErbB4 receptors and neuregulins in the olfactory epithelium and in the olfactory bulb of normal and lesioned mice.

TECHNICAL SKILLS

Behavioral tests: fear conditioning, Morris water maze, Barnes maze, object recognition and object placement, Y-maze, open field, marble burying, elevated plus maze, novelty suppressed feeding, novelty induced hypophagia light-dark box, tail suspension, forced swimming, social interaction, resident-intruder, pre-pulse inhibition, splash test, sucrose preference test, rotarod test, pole test, rearing-climbing test, grip strength, hanging test
Molecular biology and biochemistry: DNA, RNA, miRNA extraction from tissues and cells; total extraction and subcellular fractionation of proteins from tissues and cells; protein assays, enzyme assays, ELISA assays, RT-PCR and Real Time PCR, SDS-Page electrophoresis, Western blot; Chromatin Immunoprecipitation, Southern blot, Cloning, Sequencing.
Animal handling: management of mouse models of premature aging (Samp78 and SamR1); management of genetically modified mouse colonies; stress paradigms (restraint stress, social isolation, social defeat, forced swimming stress); exercise paradigms; drug treatments on mouse and rat (i. p.; s.c.; p.o.; i.c.v.), infusions and brain injury by stereotactic, intracardiac perfusion, brain and peripheral tissue harvesting; embryo retrieval.
Histology: immunohistochemistry, immunofluorescence, histologic perfusion staining, OCT inclusion, paraffin, vibratome cutting, cryostat and microtome, in situ hybridization and hybridize

PUBLICATIONS

1. Kebede V, Di Sapia R, Tonesi N, Rizzi M, Balosso S, Spallaci D, Craparotta I, Pasetto L, Bonetto V, Marsella G, Porcu L, Rosati G, ***Ieraci A***, Vezzani A. Voluntary running wheel activity reduces seizure burden and affords neuroprotection in a mouse model of acquired epilepsy. Epilepsia. 2025 Feb 21. doi: 10.1111/epi.18313. Epub ahead of print. PMID: 39982429.
2. Xavier FAC, Barbieri SS, Popoli M, ***Ieraci A****. Short- and Long-Term Effects of Subchronic Stress Exposure in Male and Female Brain-Derived Neurotrophic Factor Knock-In Val66Met Mice. Biology (Basel). 2024 Apr 27;13(5):303. doi: 10.3390/biology13050303. *****Corresponding author.
3. Amadio P, Sandrini L, Zarà M, Barbieri SS, ***Ieraci A****. NADPH-oxidases as potential pharmacological targets for thrombosis and depression comorbidity. Redox Biol. 2024 Feb 1;70:103060. doi: 10.1016/j.redox.2024.103060. *****Corresponding author.
4. Ravanelli F, Musazzi L, Barbieri SS, Rovati GE,Popoli M, Barbon A, **Ieraci A*.** Differential Epigenetic Changes in the Dorsal Hippocampus of Male and Female SAMP8 Mice: A Preliminary Study *Int. J. Mol. Sci.* 2023, *24*(17),13084; https://doi.org/10.3390/ijms241713084. *****Corresponding author

5. Musazzi L, Carini G, Barbieri SS, Maggi S, Veronese N, Popoli M, Barbon A, ***Ieraci A****. Phenotypic Frailty Assessment in SAMP8 mice: sex differences and potential role of miRNAs as peripheral biomarkers. J Gerontol A Biol Sci Med Sci. 2023 Jul 9:glad160. doi: 10.1093/gerona/glad160. Epub ahead of print. PMID: 37422721. *****Corresponding author
6. Musazzi L, Mingardi J, ***Ieraci A***, Barbon A, Popoli M. Stress, microRNAs, and stress-related psychiatric disorders: an overview. Mol Psychiatry. 2023 Jun 30. doi: 10.1038/s41380-023-02139-3. Epub ahead of print. PMID: 37391530. *****Corresponding author
7. Torrisi SA, Rizzo S, Laudani S, **Ieraci A**, Drago F, Leggio GM. Acute stress alters recognition memory and AMPA/NMDA receptor subunits in a sex-dependent manner. Neurobiol Stress. 2023 May 26;25:100545.
8. Bonifacino T, Mingardi J, Facchinetti R, Sala N, Frumento G, Ndoj E, Valenza M, Paoli C, **Ieraci A**, Torazza C, Balbi M, Guerinoni M, Muhammad N, Russo I, Milanese M, Scuderi C, Barbon A, Steardo L, Bonanno G, Popoli M, Musazzi L. Changes at glutamate tripartite synapses in the prefrontal cortex of a new animal model of resilience/vulnerability to acute stress. Transl Psychiatry. 2023 Feb 18;13(1):62. doi: 10.1038/s41398-023-02366-w. (**IF: 7.989**)
9. Beggiato S, **Ieraci A,** Zuccarini M, Di Iorio P, Schwarcz R, Ferraro L. Alterations in rat prefrontal cortex kynurenic acid levels are involved in the enduring cognitive dysfunctions induced by tetrahydrocannabinol exposure during the adolescence. Front Psychiatry. 2022 Nov 22;13:996406. doi: 10.3389/fpsyt.2022.996406. (**IF: 5.435**)
10. Musazzi L, Tornese P, Sala N, Lee FS, Popoli M, **Ieraci A*.** Acute stress induces an aberrant increase of presynaptic release of glutamate and cellular activation in the hippocampus of $BDNF^{Val/Met}$ mice. J Cell Physiol. 2022 Jul 31. doi: 10.1002/jcp.30833. 2022 Jul 31. PMID: 35908196. *****Corresponding author. (**IF: 6.513**)
11. Amadio P, Macchi C, Favero C, Zarà M, Solazzo G, Dioni L, Sandrini L, Vigna L, Greco MF, Buoli M, Sirtori CR, Pesatori AC, **Ieraci A**, Ruscica M, Barbieri SS, Bollati V. Brain-Derived Neurotrophic Factor and Extracellular Vesicle-Derived miRNAs in an Italian Cohort of Individuals With Obesity: A Key to Explain the Link Between Depression and Atherothrombosis. Front Cardiovasc Med. 2022 Jul 13;9:906483. doi: 10.3389/fcvm.2022.906483. PMID: 35911513. (**IF: 5.846**)
12. Sbai O, Djelloul M, Auletta A, **Ieraci A**, Vascotto C, and Perrone L. (2022) RAGE-TXNIP axis drives inflammation in Alzheimer`s by targeting Aβ to mitochondria in microglia Cell Death and Diseases Apr 4;13(4):302. doi: 10.1038/s41419-022-04758-0. PMID: 35379773 (**IF: 9.705)**
13. Carini G, Mingardi J, Bolzetta F, Cester A, Bolner A, Nordera G, La Via L, **Ieraci A**, Russo I, Maggi S, Calza S, Popoli M, Veronese N, Musazzi L, Barbon A. (2022) miRNome Profiling Detects miR-101-3p and miR-142-5p as Putative Blood Biomarkers of Frailty Syndrome. Genes (Basel). Jan 26;13(2):231. doi: 10.3390/genes13020231. PMID: 35205276. (**IF: 4.141**)
14. Sandrini L, Amadio P, **Ieraci A**, Malara A, Werba JP, Soprano PM, Balduini A, Zarà M, Bonomi A, Veglia F, Colombo GI, Popoli M, Lee FS, Tremoli E, Barbieri SS. The α_2-adrenergic receptor pathway modulating depression influences the risk of arterial thrombosis associated with BDNFVal66Met polymorphism. **Biomed Pharmacother**. 2021 Dec 26;146:112557. doi: 10.1016/j.biopha.2021.112557. Epub ahead of print. PMID: 34965503. (**IF: 6.529**)
15. Carini G, Musazzi L, Bolzetta F, Cester A, Fiorentini C, **Ieraci A**, Maggi S, Popoli M, Veronese N, Barbon A. The Potential Role of miRNAs in Cognitive Frailty. **Front Aging**

Neurosci. 2021 Nov 12;13:763110. doi: 10.3389/fnagi.2021.763110. PMID: 34867290; PMCID: PMC8632944. (**IF:5.75**)

16. Barbieri SS, Sandrini L, Musazzi L, Popoli M, **Ieraci A***. (2021) Apocynin Prevents Anxiety-Like Behavior and Histone Deacetylases Overexpression Induced by Sub-Chronic Stress in Mice. Biomolecules. Jun 15;11(6):885. doi: 10.3390/biom11060885. PMID: 34203655; PMCID: PMC8232084. *Corresponding author. (**IF:4.879**)
17. Sandrini L, **Ieraci A**, Amadio P, Zarà M, Barbieri SS. (2020) Impact of Acute and Chronic Stress on Thrombosis in Healthy Individuals and Cardiovascular Disease Patients. **Int J Mol Sci.** Oct 22;21(21):E7818. doi: 10.3390/ijms21217818. PMID: 33105629. (**IF:5.293**)
18. Amadio P, Zarà M, Sandrini L, **Ieraci A**, Barbieri SS. (2020) Depression and Cardiovascular Disease: The Viewpoint of Platelets. **Int J Mol Sci.** Oct 13;21(20):7560. doi: 10.3390/ijms21207560. PMID: 33066277; PMCID: PMC7589256. (**IF: 5.293**)
19. **Ieraci A***, Beggiato S, Ferraro L, Barbieri SS, and Popoli M. (2020) Kynurenine pathway is altered in BDNF Val66Met knock-in mice: effect of physical exercise. Brain Behav Immun. 2020 Oct;89:440-450. doi: 10.1016/j.bbi.2020.07.031.. *Corresponding author. (**IF:7.217**)
20. **Ieraci A***, Barbieri SS, Macchi C, Amadio P, Sandrini L, Magni P, Popoli M, Ruscica M. (2020) BDNF Val66Met polymorphism alters food intake and hypothalamic BDNF expression in mice. J Cell Physiol. May 19. Epub ahead of print. *Corresponding author. (**IF: 6.384**)
21. Beggiato S, **Ieraci A**, Tomasini MC, Schwarcz R, Ferraro L. (2020) Prenatal THC exposure raises kynurenic acid levels in the prefrontal cortex of adult rats. **Prog Neuropsychopharmacol Biol Psychiatry**. Jun 8;100:109883. doi:10.1016/j.pnpbp.2020.109883. (**IF: 5.067**)
22. **Ieraci A***, Herrera DG. (2020) Early Postnatal Ethanol Exposure in Mice Induces Sex-Dependent Memory Impairment and Reduction of Hippocampal NMDA-R2B Expression in Adulthood. **Neuroscience.** Feb 10;427:105-115. doi: 10.1016/j.neuroscience.2019.11.045. *Corresponding author. (**IF: 3.69**)
23. Sandrini L, **Ieraci A**, Amadio P, Zarà M, Mitro N, Lee FS, Tremoli E, Barbieri SS. (2019) Physical Exercise Affects Adipose Tissue Profile and Prevents Arterial Thrombosis in BDNF Val66Met Mice. **Cells**. Aug 11;8(8). pii: E875. doi: 10.3390/cells8080875. (**IF: 4.366**)
24. Tornese P, Sala N, Bonini D, Bonifacino T, La Via L, Milanese M, Treccani G, Seguini M, **Ieraci A**, Mingardi J, Nyengaard JR, Calza S, Bonanno G, Wegener G, Barbon A, Popoli M, Musazzi L. (2019) Chronic mild stress induces anhedonic behavior and changes in glutamate release, BDNF trafficking and dendrite morphology only in stress vulnerable rats. The rapid restorative action of ketamine. **Neurobiol Stress**. Apr 2;10:100160. doi: 10.1016/j.ynstr.2019.100160. (**IF: 7.197**)
25. Sandrini L**, Ieraci A**, Amadio P, Veglia F, Popoli M, Lee FS, Tremoli E, Barbieri SS. (2018) Sub-Chronic Stress Exacerbates the Pro-Thrombotic Phenotype in BDNF(Val/Met) Mice: Gene-Environment Interaction in the Modulation of Arterial Thrombosis. **Int J Mol Sci**. Oct 19;19(10). pii: E3235. doi:10.3390/ijms19103235. (**IF: 4.183**)
26. Sandrini L, Di Minno A, Amadio P, **Ieraci A**, Tremoli E, Barbieri SS. (2018) Association between Obesity and Circulating Brain-Derived Neurotrophic Factor (BDNF) Levels: Systematic Review of Literature and Meta-Analysis. **Int J Mol Sci**. Aug 3;19(8). pii: E2281. doi: 10.3390/ijms19082281. Review. (**IF: 4.183**)
27. Mallei A*, **Ieraci A***#, Popoli M. (2019) Chronic social defeat stress differentially regulates the expression of BDNF transcripts and epigenetic modifying enzymes in susceptible and

resilient mice. **World J Biol Psychiatry.** Sep;20(7):555-566. doi: 10.1080/15622975.2018.1500029. *Equally contributed; #Corresponding author. (**IF: 4.164**)

28. Mallei A*, **Ieraci A***, Corna S, Tardito D, Lee FS, Popoli M. (2018) Global epigenetic analysis of BDNF Val66Met mice hippocampus reveals changes in dendrite and spine remodeling genes. **Hippocampus**. Nov;28(11):783-795. doi: 10.1002/hipo.22991. *Equally contributed (**IF: 3.267**)
29. **Ieraci A***, Herrera DG. (2018) Nicotinamide Inhibits Ethanol-Induced Caspase-3 and PARP-1 Over-activation and Subsequent Neurodegeneration in the Developing Mouse Cerebellum. **Cerebellum**. Jun;17(3):326-335. doi: 10.1007/s12311-017-0916-z. *Corresponding author. (**IF: 3.413**)
30. Sandrini L, **Ieraci A**, Amadio P, Popoli M, Tremoli E, Barbieri SS. (2017) Apocynin Prevents Abnormal Megakaryopoiesis and Platelet Activation Induced by Chronic Stress. **Oxid Med Cell Longev.** 2017:9258937. doi: 10.1155/2017/9258937. (**IF: 4.936**)
31. Amadio P, Sandrini L, **Ieraci A**, Tremoli E, Barbieri SS. (2017) Effect of Clotting Duration and Temperature on BDNF Measurement in Human Serum. **Int J Mol Sci.** Sep 15;18(9). pii: E1987. doi: 10.3390/ijms18091987. (**IF: 3.687**)
32. Amadio P, Colombo GI, Tarantino E, Gianellini S, **Ieraci A**, Brioschi M, Banfi C, Werba JP, Parolari A, Lee FS, Tremoli E, Barbieri SS. (2017) BDNF Val66met polymorphism: a potential bridge between depression and thrombosis. **Eur Heart J**. May 7;38(18):1426-1435. doi: 10.1093/eurheartj/ehv655. (**IF: 23,425**)
33. **Ieraci A***, Madaio AI, Mallei A, Lee FS, Popoli M. (2016) Brain-Derived Neurotrophic Factor Val66Met Human Polymorphism Impairs the Beneficial Exercise-Induced Neurobiological Changes in Mice. **Neuropsychopharmacology**. Dec;41(13):3070-3079. doi: 10.1038/npp.2016.120. *Corresponding author. (**IF: 6.404**)
34. **Ieraci A***, Mallei A, Popoli M. (2016) Social Isolation Stress Induces Anxious-Depressive-Like Behavior and Alterations of Neuroplasticity-Related Genes in Adult Male Mice. **Neural Plast**. 2016:6212983. doi: 10.1155/2016/6212983. *Corresponding author. (**IF: 3.054**)
35. Mallei A, Baj G, **Ieraci A**, Corna S, Musazzi L, Lee FS, Tongiorgi E, Popoli M. (2015) Expression and Dendritic Trafficking of BDNF-6 Splice Variant are Impaired in Knock-In Mice Carrying Human BDNF Val66Met Polymorphism. **Int J Neuropsychopharmacol**. Jun 24;18(12). pii: pyv069. doi: 10.1093/ijnp/pyv069. (**IF: 4.333)**.
36. **Ieraci A***, Mallei A, Musazzi L, Popoli M. (2015) Physical exercise and acute restraint stress differentially modulate hippocampal brain-derived neurotrophic factor transcripts and epigenetic mechanisms in mice. Hippocampus. Nov;25(11):1380-92. doi: 10.1002/hipo.22458. *Corresponding author. (**IF: 4.074**)
37. Musazzi L, Rimland JM, **Ieraci A**, Racagni G, Domenici E, Popoli M. (2014) Pharmacological characterization of BDNF promoters I, II and IV reveals thatserotonin and norepinephrine input is sufficient for transcription activation. **Int J Neuropsychopharmacol.** May;17(5):779-91. doi:10.1017/S1461145713001685. (**IF: 5.264**)
38. Conforti P, Zuccato C, Gaudenzi G, **Ieraci A**, Camnasio S, Buckley NJ, Mutti C, Cotelli F, Contini A, Cattaneo E. (2013) Binding of the repressor complex REST-mSIN3b by small molecules restores neuronal gene transcription in Huntington's disease models. **J Neurochem.** Oct;127(1):22-35. doi: 10.1111/jnc.12348. (**IF: 4.244**)
39. Santambrogio S, Ricca A, Maderna C, **Ieraci A**, Aureli M, Sonnino S, Kulik W, Aimar P, Bonfanti L, Martino S, Gritti A. (2012) The galactocerebrosidase enzyme contributes to

maintain a functional neurogenic niche during early post-natal CNS development. **Hum Mol Genet.** Nov 1;21(21):4732-50. doi: 10.1093/hmg/dds313. Epub 2012 Aug 1. (**IF: 7.692**)

40. **Ieraci A**, Herrera DG. (2007) Single alcohol exposure in early life damages hippocampal stem/progenitor cells and reduces adult neurogenesis. Neurobiol Dis. Jun;26(3):597-605. Epub 2007 Mar 28. doi.org/10.1016/j.nbd.2007.02.011. (**IF: 4.377)**.
41. Moumen A*****, **Ieraci A***, Patané S, Solé C, Comella JX, Dono R, Maina F. (2007) Met signals hepatocyte survival by preventing Fas-triggered FLIP degradation in a PI3k-Akt-dependent manner. **Hepatology**. May;45(5):1210-7. doi.org/10.1002/hep.21604. *Equally contributed. (**IF: 10.734)**.
42. Chen ZY, Jing D, Bath KG, **Ieraci A**, Khan T, Siao CJ, Herrera DG, Toth M, Yang C, McEwen BS, Hempstead BL, Lee FS. (2006) Genetic variant BDNF (Val66Met) polymorphism alters anxiety-related behavior. **Science**. Oct 6;314(5796):140-3. doi: 10.1126/science.1129663. (**IF: 30.028)**.
43. Herrera DG, **Ieraci A** (2006). Fetal alcohol syndrome and essential fatty acids. Authors' reply. **PLoS Med**. Apr 3(5): e248. doi.org/10.1371/journal.pmed.0030248. (**IF: 13.75)**.
44. **Ieraci A**, Herrera DG. (2006) Nicotinamide protects against ethanol-induced apoptotic neurodegeneration in the developing mouse brain. **PLoS Med**. Apr;3(4):e101. Epub 2006 Feb 21. (**IF: 13.75)**.
45. Chen ZY, **Ieraci A**, Tanowitz M, Lee FS. (2005) A novel endocytic recycling signal distinguishes biological responses of Trk neurotrophin receptors. **Mol Biol Cell.** Dec;16(12):5761-72. Epub 2005 Oct 5. doi.org/10.1091/mbc.e05-07-0651. (**IF: 6.52)**.
46. Chen ZY, **Ieraci A**, Teng H, Dall H, Meng CX, Herrera DG, Nykjaer A, Hempstead BL, Lee FS. (2005) Sortilin controls intracellular sorting of brain-derived neurotrophic factor to the regulated secretory pathway. **J Neurosci.** Jun 29;25(26):6156-66. doi.org/10.1523/JNEUROSCI.1017-05.2005. (**IF: 7.506)**.
47. Prunotto C, Crepaldi T, Forni PE, **Ieraci A**, Kelly RG, Tajbakhsh S, Buckingham M, Ponzetto C. (2004) Analysis of Mlc-lacZ Met mutants highlights the essential function of Met for migratory precursors of hypaxial muscles and reveals a role for Met in the development of hyoid arch-derived facial muscles. **Dev Dyn.** Nov;231(3):582-91. doi.org/10.1002/dvdy.20177. (**IF: 2.868)**
48. **Ieraci A**, Forni PE, Ponzetto C. (2002) Viable hypomorphic signaling mutant of the Met receptor reveals a role for hepatocyte growth factor in postnatal cerebellar development. **Proc Natl Acad Sci U S A**. Nov 12;99(23):15200-5. Epub 2002 Oct 23. doi.org/10.1073/pnas.222362099 (**IF: 10.70)**.
49. Ponzetto C, Panté G, Prunotto' C, **Ieraci A**, Maina F. (2000) Met signaling mutants as tools for developmental studies. Int J Dev Biol. 44(6):645-53. PubMedPMID: 11061428. (**IF: 1.963)**.
50. Perroteau I, Oberto M, **Ieraci A**, Bovolin P, Fasolo (1998) A. ErbB-3 and ErbB-4 expression in the mouse olfactory system. **Ann N Y Acad Sci**. Nov 30;855:255-9. doi.org/10.1111/j.1749-6632.1998.tb10578.x. (**IF: 0.964)**.

PRESENTATIONS

1. Different short- and long-term consequences to sub-chronic stress exposure in male and female BDNF knock-in Val66Met mice. (2021) 19th *Annual Congress of the Italian Society for Neurosciences- Brescia, Italy. Sept. 9-11.*

2. The human BDNF Val66Met polymorphism moderates the physical exercise-induced benefits in

mice. (2019) *Annual Congress of the Italian Society for Neurosciences- Perugia, Italy. Sept. 26-29.*

3. BDNF Val66Met polymorphism alters the susceptibility to stress and the response to physical exercise in mice. (2019) *Mario Negri Institute*, Milan Italy Sept. 20 (Host Dr. Annamaria Vezzani).
4. Environment-induced gene expression and behavioral changes: role of the BDNF Val66Met human polymorphism. (2018) *Lake Como School of Advanced Studies: Genes epigenome and environment in pathophysiology of brain illness. Villa del Grumello, Como, Italy Apr. 9-13*
5. Environmental factors modulate gene expression and behavioral changes: role of the BDNF Val66Met human polymorphism. (2018) *Dept. of Pharmacological and Biomolecular Sciences*, University of Milan, Italy 27 Feb (Host Prof. Alberto Corsini).
6. Impaired response to physical exercise-induced brain beneficial changes in BDNF Val66Met mutant mice is accompanied by gene expression alterations in peripheral muscles. (2016) *Conference "More than neurons: toward a less neurocentric view of brain disorders" Turin, Italy Dec1-3.*
7. Environmental modulation of BDNF levels and behavioural changes: role of the Val66Met human polymorphism. (2016) *IN-BDNF: The Italian Network on BDNF and Neuropsychiatric Diseases. Monte Bondone, TN, Italy; Jan 13-16.*
8. Environment-induced neuroplasticity changes in knock-in mice with the human BDNF Val66Met polymorphism. *Annual Congress of the Italian Society for Neurosciences- Cagliari, Italy. Oct. 8-11.*
9. 2014 Neurobiological effects of physical exercise in the human BDNF Val66Met polymorphism knock-in mice. (2014) *IN-BDNF: The Italian Network on BDNF and Neuropsychiatric Diseases. Milan, Italy; Dec 3-4.*
10. Physical exercise prevents stress-induced reduction of BDNF transcripts by epigenetic modifications. (2014) *The many faces of stress. Satellite Meeting of 9th FENS Forum of Neuroscience, Milan, Italy. July 10.*
11. Role of BDNF in the effects of physical exercise and stress. (2013) *IN-BDNF: The Italian Network on BDNF and Neuropsychiatric Diseases. Imola, Italy; Nov* 29-30.
12. Ethanol-induced neurodegeneration and neuronal stem cells apoptosis in the developing brain: protective role of nicotinamide. (2006) *Istituto San Raffaele Telethon per la Terapia Genica, Milan, Italy. May 6*.
13. Placing MET in the hierarchy of myogenic genes. (1999) *Meeting: ABCD «Regolazione dello sviluppo» San Miniato, PI, Italy. May 22-23.*

POSTERS

1. ***Ieraci A***, Ravanelli F, Musazzi L, Barbieri SS, Rovati G, Popoli M, and Barbon A (2025). Sex-specific alterations in epigenetic markers in the dorsal hippocampus of samp8 mice. *60° National Congress AINPENC - 50° National Congress AIRIC- Milan, Italy, May 14-17.*
2. ***Ieraci A***, Musazzi L, Carini G, Barbon A, Popoli M. (2021) Senescence-Accelerated Prone 8 (SAMP8) mouse a putative model of cognitive frailty. 19th *Annual Congress of the Italian Society for Neurosciences- Brescia, Italy. Sept. 9-11.*
3. Ieraci A, Xavier F, Popoli M. (2020) Short- and long-term effects of subchronic stress exposure in male and female BDNF Val66Met mice. *FENS 2020 Virtual Forum* 11-15 July
4. ***Ieraci A***, Madaio AI, Mallei A, Lee FS and Popoli M. (2015). Physical exercise-induced improvements of behavior and neuroplasticity are impaired in the BDNF Val66Met knock-in mice. *Annual Meeting Society for Neuroscience - Chicago, USA. Oct 17-21.*
5. ***Ieraci A***, Musazzi L, Mallei A, Madaio AI, Tornese P, Sala N, Lee FS and Popoli M (2015). Physical exercise- and stress-induced neuroplasticity changes in knock-in mice with the

human BDNF Val66Met polymorphism. *Annual Congress of the Italian Society Of Pharmacology- Napoli, Italy. Oct. 27-30; 2015.*

6. Mallei A, Corna S, Baj G, ***Ieraci A***, Tardito D, Lee FS, Racagni G, Tongiorgi E, Popoli M (2014). Changes in BDNF expression and dendritic trafficking of select BDNF transcripts in BDNF Val66Met mice are linked to epigenetic changes. *9th FENS Forum of Neuroscience, Milan, Italy. July 5-9*.
7. ***Ieraci A***, Mallei A, Racagni G and Popoli M. (2014) Physical exercise prevents stress-induced reduction of BDNF transcripts by epigenetic modifications. *9th FENS Forum of Neuroscience, Milan, Italy. July 5-9*.
8. ***Ieraci A***, Conforti P, Mutti C, Camnasio S, Zuccato C, Contini A and Cattaneo E (2011). Identification of small molecules inhibitors of the REST/NRSFcomplex as a possible therapy for Huntington's disease. *Molecular Mechanisms of Neurodegeneration - Milan, Italy. May 13-15.*
9. Izzo E, ***Ieraci A***, Meli S, Bortolato M, Frau R, Bini V, Salvati P, Anand R (2010). Adjuvant activity of the novel sodium channel blocker NW-3509 in combination therapy with antipsychotics. *Annual Meeting Society for Neuroscience - San Diego, CA, USA. Nov. 13-17.*
10. Izzo E, Faravelli L, Colombo E, ***Ieraci A***, Calabresi M, Meli S, Parini S, Sabido-David C, Wedzony K, Bortolato M, Frau R, Bini V, Caccia C, Melloni P, Salvati P (2009). NW-3509: a novel potent sodium channel blocker with antipsychotic potential. *Annual Meeting Society for Neuroscience, - Chicago, IL, USA. Oct. 17-21.*
11. Gritti A, Santambrogio S, ***Ieraci A*** and Maderna C (2008). Inflammatory profile in the CNS of a GLD murine model during the disease progression. *Annual Meeting Society for Inherited Metabolic Disorders Meeting, Asilomar, CA, USA. Mar. 2-5.*
12. ***Ieraci A***, S. Meli, Salvati 9, Izzo E (2009). Pharmacological characterization of hyperactivity induced by amphetamine/chlordiazepoxide mixture versus amphetamine alone in mice. *XIII Annual Congress of the Italian Society for Neurosciences- Milan, Italy. Oct. 2-5.*
13. ***Ieraci* A** Meli S, Salvati P, Izzo E (2008). Different efficacy of mood stabilizer and antipsychotic drugs to prevent the hyperactivity induced by amphetamine/chlordiazepoxide mixture or amphetamine alone in mice. *Annual Meeting Society for Neuroscience, Washington, DC, USA. Nov. 15-19*.
14. ***Ieraci* A** and Herrera DG (2007). Single alcohol exposure in early life damages hippocampal stem/progenitor cells with lasting deficits in neurogenesis and behavior. *6 th INMED TINS conference, La Ciotat, France. Sept. 5-8.*
15. ***Ieraci* A** and Herrera DG (2005). Nicotinamide protects against ethanol-induced apoptotic neurodegeneration in the developing brain. *35th Annual Meeting Society for Neuroscience - Washington, DC, USA. Nov. 12-16.*
16. ***Ieraci* A** and D.G. Herrera (2004). Pharmacological inhibition of caspase-3 in a mouse model of fetal alcohol syndrome. *4th Forum of European Neuroscience, Lisbon, Portugal. July 10-14*.
17. ***Ieraci A***, Forni PE and Ponzetto C (2001). A role for HGF in cerebellar development. *Congress of the Italian Society of Neurosciences Torino, Italy. Sept. 8-11.*
18. ***Ieraci* A,** PE Forni and C Ponzetto (2000). A role for the HGF in cerebellar development. *Tyrosine Phosphorylation and Cell Signaling, La Jolla, USA. August 9-13*.
19. Ponzetto C, ***Ieraci A***, Prunotto C, Tajbakhsh S and Buckingham M (1998). Placing MET in the hierarchy of myogenic genes. *Scientific Convetion Telethon, Roma, Italy. Nov. 15-17.*

20. Ponzetto C, Schindler A, ***Ieraci A***, Pantè G and Maina F (1998). HGF/MET: possible involvement in Waardenburg Syndrome. *Specificity in Signal Transd., Lake Tahoe, NV, USA. March, 1-7.*
21. Schindler A, ***Ieraci A***, Maina F, Martini F and Ponzetto C (1997). HGF/MET: possible involvement in Waardenburg Syndrome. *Scientific Convetion Telethon, Bologna, Nov. 16-18*
22. Oberto M, Bovolin P, ***Ieraci A***, Soncin I and Perroteau I (1997). ERBB and NRG expression in the mouse olfactory system. *Italian Congress Society of Neurosciences, Brescia, Italy. Sept. 20-23.*
23. Perroteau I, Oberto M, ***Ieraci A***, Bovolin P and Fasolo A (1997). ERBB-3 and ERBB-4 in the mouse olfactory system. *International Symposium on Olfaction and Taste XII and AchemS XIX, San Diego, CA, USA: July 7-12.*
24. Fronte M, Perroteau I, Soncin A, ***Ieraci A***, Prato G, Bovolin P and Fasolo A (1995). Modulazione dei segnali nel bulbo olfattivo ad opera di acido γ-butirrico e glutammato *VI Congresso delle Neuroscienze Italiane, Milan, Italy.*

REFERENCES