

BIOGRAPHICAL SKETCH

NAME: Viviana Trezza

POSITION TITLE: Associate Professor, Head of the Pharmacology Lab of the Dept. of Science, Roma Tre University

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Sapienza University of Rome, Italy	Master	03/2003	Pharmaceutical Chemistry
Sapienza University of Rome, Italy	PhD	01/2007	Pharmacology
Brain Center Rudolf Magnus, Utrecht (The Netherlands)	postdoc	01/2010	Neuropharmacology

A. Personal Statement

The primary goal of my research is to investigate the brain mechanisms underlying functional and dysfunctional socio-emotional behavior, with the long term of goal of identifying novel pharmacological targets for neuropsychiatric and neurodevelopmental disorders characterized by aberrant socio-emotional processing. A special emphasis in my current research, that dates back to my doctoral studies, is also placed on the role of the endocannabinoid system in the regulation of emotions and cognition through development. Over the past years, I have worked on the development of an integrative overview of how different neurotransmitter systems in a distributed network of brain areas interact to modulate socio-emotional processing and I characterized key mediating mechanisms involving the endocannabinoid, opioid, dopaminergic and noradrenergic systems. Within this line of research, I am also interested in shedding light on the brain mechanisms mediating the impact of drugs of abuse on social behavior. Experimental approaches in my lab include a combination of sophisticated behavioral, neurochemical and pharmacological methods in mouse and rat models of psychiatric diseases induced by genetic, pharmacological or environmental manipulations. I have established successful collaborations with neuropsychiatrists, psychologists, molecular neurobiologists, neuroimaging experts, organic chemists, and electrophysiologists to develop and implement experimental translational tools to study socio-emotional traits under normal and pathological conditions.

B. Positions and Honors**Positions and Employment**

2003-2007	Ph.D. student, Dept. Physiology and Pharmacology, Sapienza University of Rome (Italy).
2007-2010	Researcher, Dept. Neuroscience and Pharmacology, Brain Center Rudolf Magnus, University Medical Center Utrecht, Utrecht, The Netherlands
2010-2018	Assistant Professor and Head of the Pharmacology Lab, Dept. Science, Roma Tre University, Rome (Italy).
2018-to date	Associate Professor and Head of the Pharmacology Lab, Dept. Science, Roma Tre University, Rome (Italy).

Departmental/University activities

2010 – to date	Head of the Pharmacology Laboratory, Dept. Science, Roma Tre University, Rome 2010-present
2022 – to date	Coordinator of the Master Course in Pharmacy, Dept. Science, Roma Tre University, Rome
2013-2014	Head of the Animal Welfare Committee, Dept. Science, Roma Tre University, Rome, Italy
2014-2018	Member of the Quality Assurance Committee for research and teaching, Roma Tre University, Rome, Italy
2010-present	Member of the Advisory Board of the PhD School in Biomedical Sciences, Roma Tre University, Rome, Italy

Principal Investigator: Trezza Viviana

- 2011 Member of the final dissertation Committee of the PhD School in Neurobiology, Sapienza University of Rome, Italy
- 2022-present Member of the Advisory Board of the National PhD School in Theoretical and Applied Neuroscience (TAN), Italy

Awards

- 2008 Prize for “the best young Pharmacology Researcher” sponsored by the Italian Society of Pharmacology (SIF) for the five most promising Italian Researchers younger than 35.
- 2010 Direct appointment at Roma Tre University (Italy). According to current Italian legislation, this recruitment process is reserved to researchers who, while appointed at foreign Universities for at least 3 years, performed excellent research in their own field leading to publications in leading international journals, demonstrated superior academic teaching, actively advised doctoral students and contributed to the intellectual life of their Institution (Decreto Ministeriale 23 settembre 2009 prot. n. 45/2009).
- 2013 European Behavioral Pharmacology Society (EBPS) Young Investigator Award

MAIN GRANTS AS PI: Jerome Lejeune Foundation Research grant 2023 (Ongoing); MIUR PRIN 2022 (Ongoing); Bando Regione Lazio Progetti di Gruppi Ricerca 2020 (Ongoing); MIUR PRIN 2017 (Completed); Autism Speakes 2019 (Completed); Jerome Lejeune Foundation Research grant 2017 (Completed); MIUR Firb Futuro in Ricerca (Completed in 2017), “Nederlandse Organisatie voor Wetenschappelijk Onderzoek” Veni grant n. 91611052 (Completed in 2015); 7th Framework Programme People, Marie Curie Career Reintegration grant (Completed in 2016).

C. Contribution to Science

Total number of publications in peer-reviewed international journals: 125; Total citations: 7448 (Scopus); updated on 08/09/2023, Hirsch (H) index: 47 (Scopus); updated on 08/09/2023

Five main publications in the last 3 years:

Schiavi S., Manduca A., Carbone E., Buzzelli V., Rava A., Feo A., Ascone F., Morena M., Campolongo P., Hill M.N., Trezza V. (2023) Anandamide and 2-arachidonoylglycerol differentially modulate autistic-like traits in a genetic model of autism based on FMR1 deletion in rats. *Neuropsychopharmacology*, 48(6):897-907.

Schiavi S., Carbone E., Melancia F., di Masi A., Jarjat M., Brau F., Cardarelli S., Giorgi M., Bardoni B., Trezza V. (2022) Phosphodiesterase 2A inhibition corrects the aberrant behavioral traits observed in genetic and environmental preclinical models of Autism Spectrum Disorder. *Translational Psychiatry*, 12(1):119, doi.org/10.1038/s41398-022-01885-2.

Prieto M., Folci A., Poupon G., Schiavi S., Buzzelli V., Pronot M., François U., PousinhaP., Lattuada N., Abelanet S., Castagnola S., Chafai M., Khayachi A., Gwizdek C., Brau F., Deval E., Francolini M., Bardoni B., Humeau Y., Trezza V., Martin S. (2021) Missense mutation of Fmr1 results in impaired AMPAR-mediated plasticity and socio-cognitive deficits in mice. *Nature Communications*, 12(1):1557.

Carbone E., Manduca A., Cacchione C., Vicari S., Trezza V. (2021) Healing autism spectrum disorder with cannabinoids: a neuroinflammatory story. *Neuroscience and Biobehavioral Reviews*, 121:128-143

Schiavi S., Melancia F., Carbone E., Buzzelli V., Manduca A., Jiménez Peinado P., Zwergel C., Mai A., Campolongo P., Vanderschuren L.J.M.J., Trezza V. (2020) Detrimental effects of the abused ‘bath salt’ Methylenedioxypropylvalerone on social play behavior in male rats. *Neuropsychopharmacology*, 45(12):2012-2019