

Curriculum vitae

Personal information

Name: Valentina
Last name: Carpentieri

Education

2023 - Bachelor's degree in Biological Sciences 110 cum laude/110
SAPIENZA UNIVERSITY OF ROME Roma, IT

In corso - Master's degree in Neurobiology
SAPIENZA UNIVERSITY OF ROME Roma, IT

Work experiences

2020-2023, Internship
Center for Behavioral Sciences and Mental Health, Istituto Superiore di Sanità, I-00161 Rome, Italy

2022, Internship
Department of Medical-Surgical Sciences and Biotechnologies, Sapienza University of Rome, I-00161 Rome, Italy

2023-2025, Master's thesis
National Research Council, Institute of Biophysics, Palermo, IT

Teaching experiences

2024-25 tutor for scientific subjects
Project: "compiti@casa, curare la fragilità educativa"

Skills

Lab molecular techniques (PCR, electrophoresis...); observation of behaviors in laboratory animals, Data analysis of human psychometric scales (CBCL 1 ½-5, GSI...); *in silico* experiment using NEURON simulation environment; experience in Python, Matlab and Hoc programming.

Peer-reviewed publications

Carpentieri, V., Bernard, C., & Migliore, M. The accumulation of extracellular K⁺ as *in vivo* model of epilepsy in CA1 pyramidal neurons. *Under Review*.

Carpentieri, V., Cugno, S., Lockic, K., Pascale, E., & Adriani, W. (2023). DAT1 5'-Untranslated-Region Methylation Patterns as Bio-Markers of ADHD Psycho-Pathology: Contribution to Disease Prognosis and to Monitoring of a Successful Therapy. *Biomedicines*, 11(9), 2546.

Carpentieri, V., Lambacher, G., Troianiello, M., Pucci, M., Di Pietro, D., Laviola, G., D'Addario, C., Pascale, E., & Adriani, W. (2023). Methylation Dynamics on 5'-UTR of DAT1 Gene as a BioMarker to Recognize Therapy Success in ADHD Children. *Children (Basel, Switzerland)*, 10(3), 584.

Carpentieri, V., Pascale, E., Cerniglia, L., Pucci, M., D'Addario, C., Laviola, G., Adriani, W., & Cimino, S. (2022). Methylation patterns within 5'-UTR of DAT1 gene as a function of allelic 3'-UTR variants and their maternal or paternal origin: May these affect the psychopathological phenotypes in children? An explorative study. *Neuroscience letters*, 791, 136916.

Carpentieri, V., Cerniglia, L., Cimino, S., Pucci, M., Pascale, E., D'Addario, C., & Adriani, W. (2021). Epigenetic regulation of DAT gene promoter modulates the risk of externalizing and internalizing behaviors on a normative population: An explorative study. *Behavioral brain research*, 406, 113246.

De Nardi, L., Carpentieri, V., Pascale, E., Pucci, M., D'Addario, C., Cerniglia, L., Adriani, W., & Cimino, S. (2020). Involvement of DAT1 Gene on Internet Addiction: Cross-Correlations of Methylation Levels in 5'-UTR and 3'-UTR Genotypes, Interact with Impulsivity and Attachment-Driven Quality of Relationships. *International journal of environmental research and public health*, 17(21), 7956.

Seminars

2021, Title: *"The maternal or paternal origins of DAT1 alleles may affect the methylation dynamics at its 5'-UTR and psychopathological phenotypes in children: an explorative study"*, to Istituto Superiore di Sanità, Rome, IT

Conference poster session

2024 - "The accumulation of extracellular K⁺ as *in vivo* model of epilepsy in CA1 pyramidal neurons" to Italian Network for Computational Neuroscience (INCN '24), in Istituto Superiore di Sanità (Italian National Institute of Health) in Rome.

2024 - "The accumulation of extracellular K⁺ as *in vivo* model of epilepsy in CA1 pyramidal neurons" to The EBRAINS-Italy Research Infrastructure for Neuroscience, in Villa Doria D'Angri, Napoli.

2025 - "The accumulation of extracellular K⁺ as *in vivo* model of epilepsy in CA1 pyramidal neurons" Computational and Systems Neuroscience (COSYNE) 2025 in Montreal and Mont Tremblant, QC, Canada.

