

Curriculum

SKILLS

Tools and Languages	Python, Fortran, \LaTeX , R, MatLab
Research topic	Machine Learning, Data Analysis, Quantitative analysis of behavior
Communication	English, Italian

EDUCATION

PhD in Chemical and Pharmaceutical Sciences and Biotechnology University of Camerino, Camerino, Italy International School of Advanced Studies Department of Experimental Medicine and Public Health Supervisor: Prof. Massimo Ubaldi	November 2020 - Present
Master Degree on Physics, University of Camerino 110/110, Title: Engineering the noise of a cavity field by means of a digital feedback, Advisor: Prof. Giovanni di Giuseppe	October 2017 - October 2020
Bachelor Degree on Physics, University of Camerino 110/110, Title: Rumore quantistico in interferometri per la rilevazione di onde gravitazionali, Advisor: Prof. David Vitali	October 2013 - April 2017

RESEARCH EXPERIENCE

Visiting Ph.D. student, University of Geneva Advisor: Prof. Camilla Bellone	April 2023 - September 2023
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POSTER PRESENTATION

Della Valle, A., De Carlo, S., Petetta, F., Ciccocioppo, R., Ubaldi, M. (2022) Deep Learning approach for the recognition of behaviours in Forced Swim Test. *41° Congresso Nazionale della SIF*, 16-19 November 2022, Rome, Italy

PUBLISHED PAPER

Toivainen, S., Xu, I., Gobbo, F., **Della Valle, A.**, Coppola, A. Heiling, M., Domi, E. (2024) Different mechanisms underlie compulsive alcohol self-administration in male and female rats. *Biology of Sex Differences*
De Carlo, S. Mrizak, H., **Della Valle, A.**, Lunerti, V., Mammone, A., Kyratzi, M. O., Lacorte, A., Keshishian, A., Li, M., Woods, L. S., Soverchia, L., Domi, E., Ubaldi, M., Ciccocioppo, R., Cannella, N. Predicting individual treatment response in alcohol use disorders: a reverse translational proof-of-concept study. *Submitted to Biomedicine Pharmacotherapy*

AWARDS

Borsa per i migliori poster presentati nell'ambito del 41° Congresso Nazionale della SIF Società Italiana di Farmacologia Rome, Italy	November 2022
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CONFERENCES AND COURSES ATTENDED

Machine Learning for Spectroscopy Bruxelles, Belgium	May 2025
AI-based approaches to preserve enviromental and human health San Benedetto del Tronto, Italy	May 2025
NATO SPS Multi-Year Project SARS-CoV-2 Multi-Messenger Monitoring for Occupational Health Safety (SARS 3M);	February 2025
Camerino, Italy	
Machine Learning: Mathematical aspects, techniques, and applications Rome, Italy	September 2024
Conference INSERM workshop 276 Bordeaux, France	October 2023
41° Congresso Nazionale della SIF Rome, Italy	November 2022
Neuromatch Academy Deep Learning Online Summer School	July 2022
7th international conference in machine learning, optimization data science LOD 2021 Grasmere, Lake District, England – UK	October 2021
1st international advanced course symposium on Artificial Intelligence Neuroscience ACAIN 2021 Grasmere, Lake District, England – UK	October 2021
4th Advanced course on Data Science and Machine learning University of Pisa, Italy	July 2021
Cajal week Project Encephalon, India	May 2021
SuperFluctuations 2017 Fluctuations and Highly Non Linear Phenomena in Superfluids and Superconductors, University of Camerino	October 2017

TEACHING ACVITIES

Instructional tutorial of Physics <i>University of Camerino</i> <ul style="list-style-type: none">• Mechanics (Physics 1)	October 2021 — January 2022 <i>Camerino, Italy</i>
Instructional tutorial of Physics <i>University of Camerino</i> <ul style="list-style-type: none">• Mechanics (Physics 1)	October 2020 — January 2021 <i>Camerino, Italy</i>
Instructional tutorial of Physics <i>University of Camerino</i> <ul style="list-style-type: none">• Fluid dynamics e Thermo dynamics (Physics 1)	March 2020 — June 2020 <i>Camerino, Italy</i>
Instructional tutorial of Physics <i>University of Camerino</i> <ul style="list-style-type: none">• Mechanics (Physics 1)	October 2019 — January 2020 <i>Camerino, Italy</i>
Instructional tutorial of Physics <i>University of Camerino</i> <ul style="list-style-type: none">• Physics 1	October 2018 — June 2019 <i>Camerino, Italy</i>