

CURRICULUM VITAE



PERSONAL INFORMATION

Name **GAIASCHI LUDOVICA**
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Nationality Italian
Date of birth 12 July 1997

WORK EXPERIENCE

- June 2023- to date Research trainee at the *Harvey Cushing Neurooncology Research Laboratories, Cho Laboratory, Department of Neurosurgery, Harvard Medical School, Brigham and Women's Hospital, Boston (Massachusetts, USA)*
- October 2021- to date PhD student at the *Laboratory of Cell Biology and Neurobiology, Department of Biology and Biotechnology Lazzaro Spallanzani* of the University of Pavia

Collaboration of tutoring and teaching in *Cytology and Histology, Department of Biology and Biotechnology Lazzaro Spallanzani* of the University of Pavia
Acquisition of the title of Subject expert in the scientific-disciplinary sector BIO/06

Tutoring, guide and supervision of undergraduates and masters in the field of Biological Sciences, Biotechnology and Neurobiology
- May 2020- October 2021 Trainee at the *Laboratory of Infectious Diseases III division, Department of Biomedical Sciences and Clinics Luigi Sacco (MI)*
- December 2018- July 2019 Trainee at the *Laboratory of Medical Genetics and General Biology* of the University of Pavia

EDUCATION AND TRAINING

- June 2023 Training course for the use of animals for scientific purposes.
Advanced breeding practices, form 23, dm 5 August 2021.
Ethics and project design, modules 9, 10, 11, dm 5 August 2021.
Zebrafish as a model organism: in vitro and in vivo experimental approaches in scientific research.

- February 2023 Training course for the use of animals for scientific purposes.
Biology and management of laboratory animals, modules 3.1, 4, 5, 6.1, 7, dm 5 August 2021, rodents and lagomorphs.
National legislation and ethics, 1 level, modules 1 and 2, dm 5 August 2021.
- September 2022 Training course for tutoring collaborations a.y. 2022/2023
 - June 2022 Acquisition of 24 credits in anthro-psycho-pedagogical disciplines and in teaching methodologies and technologies (PF 24)
- 2021- to date University of Pavia
PhD Course in Genetics, Molecular and Cellular Biology
- 2019- 2021 University of Pavia
Faculty of Medical and Pharmaceutical Biotechnology, Pharmaceutical specialization
Graduated on 19/10/2021 with grade: 110/110
- 2016- 2019 University of Pavia
Faculty of Biotechnology, Medical-Pharmaceutical specialization
Graduated on 22/07/2019 with grade: 103/110
- 2011-2016 ISS Taramelli-Foscolo, classical section, Pavia
High School Diploma with evaluation: 76/100

**PROFESSIONAL SKILLS AND
COMPETENCES**

- Processing in sterile conditions and with infected material, work experience in P2 and P3 level laboratories
- Extraction of viral RNA from plasma, serum and supernatant
- Extraction of genomic DNA from whole blood and tissue
- Extraction of bacterial DNA from colonies
- Nucleic acid extraction by automatic extractor with QIAcube, Quiagen
- Synthesis and amplification of cDNA by RT-PCR
- DNA amplification with PCR
- Amplified DNA purification
- Electrophoresis on agarose gels
- Preparation of next generation libraries using automation system as Microlab STAR Liquid Handling System, Hamilton
- Sequencing through next generation sequencing, MiSeq, NextSeq, Illumina
- Alignment of amino acid and nucleotide sequences and mutation analysis
- Phylogenetic analysis of nucleotide sequences by Neighbor-Joining, Maximum Likelihood and Bayesian methods
- Droplet Digital PCR
- Application of the Enzyme-Linked Immuno Sorbent Assay-ELISA technique
- Separation of PBMCs by density gradient centrifugation
- Preparation and maintenance of cell cultures
- In vitro infection methods
- Fixation and inclusion of autopsy samples
- Microtome cutting
- IHC and ICC techniques
- Use of light microscopy techniques
- Protein extraction and dosage
- Protein separation by SDS-PAGE electrophoresis
- Western blot
- Good command of software (Cell^F, ImageJ, Prism) and databases of biological interest (NCBI, UCSC, UniProt, OMIM), usage: Office package, Windows, Android, Windows Portable and internet browsers.

PERSONAL SKILLS AND COMPETENCES

LANGUAGES

Italian and English

RELATIONAL SKILLS AND COMPETENCES

Empathetic and predisposed to human contact. Good organizational skills. Prone to both teamwork and individual work. Able to foster complicity in the work team essential for the sharing of ideas.

WORK SKILLS AND COMPETENCES

Diligent and able to plan and meet commitments. Careful in the care of relations with collaborators.

DRIVING LICENSE

Driving license B

CONGRESS PRESENTATIONS AND POSTERS

1. "Glioblastoma Multiforme: study of the synergic effect of medicinal mushrooms and a new platinum compound in U251 human glioblastoma cell line", L Gaiaschi, C Casali, C Favaron, F Gola, E Roda, P Rossi, MG Bottone, FENS Forum 2022 - Federation of European Neuroscience Societies - International Neuroscience Conference - 9-13 July 2022, Paris, France.
2. "Synergic effects of medicinal mushrooms and a new platinum compound on human glioblastoma cells U251", L Gaiaschi, C Favaron, C Casali, F Gola, E Roda, P Rossi, MG Bottone, Next generation neurobiology training: a new era begins at University of Pavia 2022, Pavia, Italy.
3. "Study of the nutritional properties and benefits of Voghera sweet pepper on aging and related diseases", F Gola, C Favaron, L Gaiaschi, C Angelinetta, E Regola, R Vicini, D Ratto, P Rossi, MG Bottone, Next generation neurobiology training: a new era begins at University of Pavia 2022, Pavia, Italy.
4. "Glioblastoma Multiforme: study of cell alterations due to platinum compounds and phytotherapy in T98G and U251 human glioblastoma cell lines", L Gaiaschi, C Casali, F Gola, F De Luca, C Favaron, M Ravera, P Rossi, G Mazzini, MG Bottone, GIC 2023 - 41st National Cytometry Conference - 17-19 May 2023, Naples, Italy.
5. "The epigenetics of thermal stress: an approach in flow cytometry and electron microscopy", C Casali, L Gaiaschi, L Zannino, M Cavallo, G Milanesi, G Mazzini, M Biggiogera, GIC 2023 - 41st National Cytometry Conference - 17-19 May 2023, Naples, Italy.
6. "A potion of eternal youth: the anti-aging effect of Voghera Sweet Pepper", F De Luca, F Gola, C Casali, L Gaiaschi, G Mazzini, R Vicini, E Roda, P Rossi, MG Bottone, GIC 2023 - 41st National Cytometry Conference - 17-19 May 2023, Naples, Italy.
7. "Effects of heat and cold shock on epigenetics: insights on methylation and chromatin structure", C Casali, L Gaiaschi, L Zannino, L Galgano, M Sarkar, G Mazzini, MG Bottone, M Biggiogera, 27th Wilhelm Bernhard Workshop on the Cell Nucleus - 19-23 June 2023, Prague, Czech Republic.

SCIENTIFIC PUBLICATIONS

1. "The power of a novel combined anticancer therapy: challenge and opportunity of micotherapy in the treatment of Glioblastoma Multiforme", L Gaiaschi, E Roda, C Favaron, F Gola, E Gabano, M Ravera, P Rossi, MG Bottone, *Biomedicine & Pharmacotherapy* 155 (2022) 113729, ISSN 0753-3322, <https://doi.org/10.1016/j.biopha.2022.113729>.
2. "Voghera Sweet Pepper: A Potential Ally against Oxidative Stress and Aging", F Gola, L Gaiaschi, E Roda, F De Luca, F Ferulli, R Vicini, P Rossi, MG Bottone, *International Journal of Molecular Sciences* 2023, 24, 3782. <https://doi.org/10.3390/ijms24043782>.
3. "Study on the activation of cell death mechanisms: in search of new therapeutic targets in glioblastoma multiforme", L Gaiaschi, C Favaron, C Casali, F Gola, F De Luca, M Ravera, E Roda, P Rossi, MG Bottone, *Apoptosis* 2023. <https://doi.org/10.1007/s10495-023-01857-x>.

