

# C U R R I C U L U M V I T A E

## E L E N A F O N T A N A



### PERSONAL DETAILS

**City of residence:** Verona, Italy

**Nationality:** Italian

**Telephone:** 3313104848

**E-mail:** fontanaelena93@gmail.com  
elena.fontana\_01@univr.it

**LinkedIn:** <https://www.linkedin.com/in/elena-fontana-98a1b951/>

### CURRENT POSITION

October 2020 – present: **PhD student in Neuroscience, Psychological and Psychiatric Sciences and Movement Sciences at the Neuropathology Laboratory (Prof. Gianluigi Zanusso)**, Department of Neurosciences, Biomedicine and Movement Sciences, Neuropathology section, University of Verona, Italy.

Proteinopathies and human olfactory epithelium: immunofluorescence, microscopy and RT-QuIC on cytological samples of nasal swabbing. Image processing with Fiji, data analysis with Excel, Omega MARS and Prism. Writing, reading, reviewing of scientific articles, management of orders and offers and support for thesis students.

Supervisor: Prof. Gianluigi Zanusso

### EXPERIENCE

June 2020 – September 2020: **Attending the Neuropathology Laboratory (Prof. Gianluigi Zanusso)**, Department of Neurosciences, Biomedicine and Movement Sciences, Neuropathology section, University of Verona, Italy.

Immunofluorescence on cytological samples of nasal brushing and data analysis with Fiji, Excel and Prism.

April 2020 – June 2020: **Volunteer at the Pharmacology Laboratory (Dr. Ilaria Decimo)**, Department of Diagnostics and Public Health, Pharmacology section, University of Verona, Italy.

Continuation of activities in smart working due to COVID-19 pandemic (image processing with Fiji, data analysis with Excel and Prism, weekly lab meetings and journal clubs, writing, reading, reviewing of scientific articles and support for thesis students).

April 2019 - March 2020: **Research fellow at the Pharmacology Laboratory (Dr. Ilaria Decimo)**, Department of Diagnostics and Public Health, Pharmacology section, University of Verona, Italy.

Involvement in the European project HERMES-FET: Development of biohybrid systems for regenerative medicine. Animal care, functional experiments (BMS, tape removal, ankle movement, open field, bladder functionality), surgeries and immunohistochemical experiments on mouse models of spinal cord injury to study therapeutic treatments. Cryostat cutting, staining and analysis of brains of epileptic rats. Use of brightfield, fluorescence, confocal and large-imaging microscopes (Nikon time-lapse). Image processing with Fiji, ImageScope, Photoshop. Graphs and statistics with GraphPad Prism. Data discussion in weekly lab meetings. Writing, reading and reviewing of scientific articles and support for thesis students.

March 2019: **Attending the Pharmacology Laboratory (Dr. Ilaria Decimo)**, Department of Diagnostics and Public Health, Pharmacology section, University of Verona, Italy.

Study of therapeutic treatments for spinal cord injury.

	<p>February 2018 - February 2019: <b>Trainee and thesis student at the Laboratory of Stem Cell Biology and Pharmacology of Neurodegenerative Diseases (Prof. Elena Cattaneo)</b>, INGM (National Institute of Molecular Genetics), Milan, Italy.  Characterization of the viral vector AAV2.5gfaABC1D-hSREBP2-tdTomato in a mouse model of Huntington's disease: DNA extraction, PCR and electrophoresis for genotype analysis, surgeries, perfusions, tissues extraction, cutting of samples with cryostat, immunohistochemistry on slide and in free-floating, use of the fluorescence and confocal microscope. Image processing with Fiji. Participation in monthly lab meetings and journal clubs. Management of orders and offers and maintenance, with the other students, of the large laboratory.  Supervisor: Prof. Elena Cattaneo</p> <p>March 2017 - April 2017: <b>Trainee at the Department of Biosciences, Paola Bellosta Lab</b>, University of Milan, Italy.  Experiments on the model system <i>Drosophila melanogaster</i>: dissection of larvae to study fat body inflammation (ROS and hemocytes infiltration) following High Fat Diet. Main techniques used: genetic crosses, fluorescence microscopy and western blot. Image processing with ImageJ.</p> <p>April 2015 - June 2015: <b>Trainee and thesis student at the Chromatin Alterations in Tumorigenesis Unit (Prof. Saverio Minucci) and at the Genome Integrity Laboratory (Prof. Marco Foiani)</b>, IFOM-IEO Campus, Milan, Italy.  Morphological and cytofluorimetric analysis, DAPI staining and Spot Assay to identify mutations in the cell cycle of the model system <i>Saccharomyces cerevisiae</i>.  Genome Editing experiments to obtain the knock-out of LSD1: plasmids cloning, digestions, PCR, purifications, electrophoresis, ligations, bacterial transformations, plating, inoculations, gel extractions, spectrophotometer dosages.  Supervisor: Prof. Saverio Minucci</p> <p>June 2011 - July 2011: <b>Intern at "G. B. Rossi" Polyclinic, Pediatric ward</b>, Integrated University Hospital of Verona, Italy.  Observation of clinical cases.</p> <p>June 2010: <b>Intern at Biological Institutes, Anatomy and Pathology section</b>, University of Verona, Italy.  Histological study of biopsies: samples cutting with microtome, preparation and staining of slides, microscopic observation.</p>
<p><b>EDUCATION</b></p>	<p>2019: <b>Master's degree in Biology Applied to Biomedical Research (LM-6)</b>, University of Milan, Italy.</p> <p>2016: <b>Degree in Biological Sciences (L-13)</b>, University of Milan, Italy.</p> <p>2012: <b>Scientific High School Diploma</b>, L.S.S. "A. Messedaglia", Verona, Italy.</p>
<p><b>AREAS OF RESEARCH</b></p>	<p>Neuroscience, Neurodegenerative diseases, <math>\alpha</math>-synucleinopathies, TDP-43pathies, Huntington's Disease, Spinal Cord Injury, human olfactory epithelium.</p>
<p><b>INTERNATIONAL EXPERIENCES AND COLLABORATIONS</b></p>	<p>Present: scientific collaborations with European and American laboratories.  July 2016: Experience in a host family in Krakow, Poland.  August 2011: Experience in a host family in Zaragoza, Spain.  July 2009: Study trip in London, UK.  September 2003: School cultural exchange in Munich, Germany.</p>

<p align="center"><b>SCIENTIFIC CONFERENCES</b></p>	<p><b>Poster presentation</b></p> <p>F.S. Dos Santos, S. Bartoletti, S. Dolci, <u>E. Fontana</u>, I. Decimo, G. Curia (2020) “Minimally invasive surgical strategies to implant cannula in CA3 ventral area”, FENS2020 Virtual Forum.</p> <p><b>Attendance</b></p> <ul style="list-style-type: none"> <li>- Virtual conference “Neuroscience Next”, AAIC, 12<sup>th</sup>-13<sup>th</sup> October 2021</li> <li>- Online congress of PhD Candidates of the University of Verona “Margins and forgotten places”, 17<sup>th</sup>-19<sup>th</sup> May 2021</li> <li>- Web conference “BraYn – 3<sup>rd</sup> Brainstorming Research Assembly for Young Neuroscientists”, 25<sup>th</sup>-26<sup>th</sup> November 2020</li> </ul>		
<p align="center"><b>LANGUAGES</b> (Common European Framework Of Reference For Languages)</p>	<p align="center"><b>Italian</b></p>	<p align="center"><b>English</b></p>	<p align="center"><b>Spanish</b></p>
<p align="center">Reading</p>	<p align="center">Mother tongue</p>	<p align="center">C1</p>	<p align="center">A2</p>
<p align="center">Writing</p>	<p align="center">Mother tongue</p>	<p align="center">C1</p>	<p align="center">A2</p>
<p align="center">Speaking</p>	<p align="center">Mother tongue</p>	<p align="center">C1</p>	<p align="center">A2</p>
<p align="center"><b>COMPUTER</b></p> <p>Programing Language</p> <p>Software</p> <p>Lab Instruments experience</p>	<p>Limited</p> <p>Office (Word, Excel, PowerPoint), ImageJ, Fiji, ImageScope, Photoshop, GraphPad Prism, Jamovi, Omega MARS, Mendeley.</p> <p>Cryostat cutting, use of brightfield, fluorescence, confocal and large-imaging microscopes, thermocycler, electrophoresis apparatus, transilluminator, ChemiDoc, syringes, Hamilton syringes, stereotaxic apparatus, impactor, peristaltic pump, spectrophotometer, NanoDrop, Countess II FL Automated Cell Counters, cytospin, hoods, scales, centrifuges, pipettes, thermoblocks, autoclave, ...</p>		
<p align="center"><b>Other titles and courses</b></p>	<p>ONLINE COURSE 2022: <b>Library resources</b>, University of Verona, Italy.</p> <p>ONLINE COURSE 2022: <b>Academic writing in Latex</b>, University of Verona, Italy.</p> <p>ONLINE COURSE 2022: <b>Academic presentation skills</b>, University of Verona, Italy.</p> <p>ONLINE COURSE 2021-2022: <b>Statistics</b>, University of Verona, Italy.</p> <p>ONLINE COURSE 2021: <b>Workshop on transversal skills</b>, University of Verona, Italy.</p> <p>ONLINE COURSE 2021: <b>Science communication</b>, University of Verona, Italy.</p> <p>ONLINE COURSE 2021: <b>Public speaking</b>, University of Verona, Italy.</p> <p>July 2021: <b>C1 English Language Test</b>, CLA, Univeristy of Verona, Italy.</p> <p>ONLINE COURSE 2021: <b>Matlab</b>, University of Verona, Italy.</p>		

	<p>ONLINE COURSE 2021: <b>Advanced English for Academic Skills</b>, University of Verona, Italy.</p> <p>ONLINE COURSE 2021: <b>English C1</b>, CLA, Univeristy of Verona, Italy.</p> <p>ONLINE COURSE 2021: <b>Digital Pathology Educational Program</b>, Leica Biosystems.</p> <p>ONLINE COURSE 2021: <b>Introduction to multicolor cytometry</b>, ISCCA School.</p> <p>ONLINE COURSE 2020: <b>Towards Horizon Europe</b>, APRE, University of Verona, Italy.</p> <p>TRAINING COURSE 2020: <b>Research projects</b>, University of Verona, Italy. Description: Procedure for the issue of authorizations and sanctioning framework; From the conception to the development of a research project; Severity assessment and Human End Points.</p> <p>TRAINING COURSE 2019: <b>CIRSAL course for staff using the enclosure</b>, University of Verona, Italy.</p> <p>ONLINE COURSE 2017: <b>General training of workers</b>, University of Milan, Italy. Description: The perception of risk; The organization of corporate prevention; The subjects of security; Workers; The protection of working mothers; Personal protective equipment; Supervision and sanctions; Information, education, training.</p> <p>May 2017: <b>B2 English Language Test</b>, SLAM, University of Milan, Italy.</p> <p>TRAINING COURSE 2017: <b>Introductory course to animal experimentation</b>, Mario Negri Pharmacological Research Institute, Milan, Italy. Description: Ethics and legislation, presentation of research projects and alternative methods, role and functions of the OPBA, methodology, techniques and housing technologies; biology of laboratory rodents, rodent strains and main pathologies, anesthesia and analgesia, necropsy techniques.</p> <p>TRAINING COURSE 2015: <b>Occupational Health and Safety</b>, IEO (European Institute of Oncology), Milan, Italy. Description: mission, values, history, company policies and procedures in the management and health sector and main notions of protection and prevention standards adopted by the Institute for the safety and health of staff and patients (Legislative Decree 81/2008), concrete example of how a company that operates in the biomedical and health sector works.</p> <p>TRAINING COURSE 2012: <b>BLS</b> (Basic Life Support), IRC (Italian Resuscitation Council), Verona, Italy.</p> <p>TRAINING COURSE 2012: <b>Research and development of the drug</b>, Aptuit, Verona, Italy.</p>
<b>Hobbies and interests</b>	Play the piano, artistic and rhythmic gymnastics, ski, skate on ice.

*I hereby authorize the processing of the personal data contained in this CV in compliance with the European Regulation (UE) 2016/679.*