Eliana LAURANZANO, PhD

PERSONAL INFO

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WORK EXPERIENCES

2015- **Senior Postdoc**, Humanitas Clinical Institute, Pharmacology and Brain Pathology Lab, Rozzano (MI), Italy. Supervisor: Prof. Michela Matteoli.

2023- **Expert** Evaluator and Reviewer, European Commission Research Executive Agency.

2023-2024 **Visiting fellow**, Molecular Oncology and Immunology Lab, IFOM, Milan, Italy. Supervisor: Prof. Massimiliano Pagani.

2013-2015 **Postdoctoral fellow**, Adaptative Immunity Lab, Humanitas Clinical Institute & Biomedical Sciences Department, University of Padua, Padua, Italy. Supervisor: Prof. Antonella Viola.

2007-2013 **PhD Candidate and Postdoctoral fellow**, Dulbecco Telethon Institute & Mario Negri Institute for Pharmacological Research, Milan, Italy. Supervisor: Dr. Valentina Bonetto.

2007 **Graduate fellow**, University of Bari, Bari, Italy. Supervisor: Prof. Francesco Giorgino.

ACCADEMIC EDUCATION

2024 **2nd level Master** in Bioinformatics and Functional Genomics, University of Milan, Italy.
Supervisors: Dr. Lorenzo Drufuca and Prof. Massimiliano Pagani.

2020 **Professional Qualification as Biologist** - Section A, University of Salento, Lecce, Italy.

2013 **Ph.D.** in Life and Biomolecular Sciences, The Open University, London (UK).
Supervisors: Dr. Andrew Grierson (University of Sheffield, UK) and Dr. Valentina Bonetto.

2010 **Pharmacological Research Specialist**, Mario Negri Institute for Pharmacological Research.
Supervisors: Dr. Valentina Bonetto and Dr. Mario Salmona.

2006 **Master of Science** (Laurea Specialistica) in Medical Biotechnologies and Molecular Medicine, University of Bari, Italy. Supervisor: Prof. Francesco Giorgino.

2004 **Bachelor of Science** (Laurea) in Sanitary and Pharmaceutical Biotechnologies, University of Bari, Italy. Supervisor: Prof. Luigi Palmieri.

GRANTS FUNDED

2021 – Identification of neuroinflammation and neuroimaging biomarkers through data driven artificial intelligence techniques for unraveling the heterogeneity of aged subjects at risk of dementia and to better inform prevention strategies. Granting agency: Italian Health Ministry (GR-2019-12370776). Role in the project: **Responsible UO @ICH**.

2020 – 2024 A humanized model of blood brain barrier to investigate immune cells infiltration in multiple sclerosis: toward a personalized medicine approach. Granting agency: FISM (2019_R-Single_032). Role in the project: **Senior Collaborator supervising scientific activities**.

2020 – The upper-limb functional rehabilitation in chronic stroke patients: From neuroimaging and biohumoral biomarkers of a personalized Action Observation Treatment based on virtual reality to a maximized and predictable rehabilitative outcome. Granting agency: Italian Health Ministry (GR-2018-12367117). Role in the project: **Co-investigator, responsible for pre-clinical analyses.**

2019 – 2023 Safety and efficacy of tauroursodeoxycholic acid (TUDCA) as add-on treatment in patients affected by amyotrophic lateral sclerosis (ALS). Granting agency: Horizon-2020 (Grant agreement ID: 755094). Role in the project: **Collaborator, responsible for exploratory biomarker analyses @ICH.**

2018 –2019 A humanized model of blood brain barrier to investigate immune cells infiltration in multiple sclerosis: toward a personalized medicine approach. Granting agency: FISM (2017/R/17 pilot project). Role in the project: **Collaborator**.

PUBLICATIONS

▪ A Neuro-Vascular Unit in vitro model for drug screening of Blood Brain Barrier permeability and Immune Cells Trafficking. **Lauranzano E**, Ravanelli M, Rasile M, Molteni R, Faggiani E, Liberatore G, Pardi R, Nobile-Orazio E, Matteoli M. Multiple Sclerosis Journal. (2023) MSMilan2023 – Paper Poster

▪ A Humanized and Personalized model of Blood Brain Barrier to investigate leukocytes infiltration in MS. Ravanelli MM, Liberatore G, Cutellè C, Campo E, Calcaterra F, Della Bella S, Mavillio D, Nobile-Orazio E, Matteoli M, **Lauranzano E**. Multiple Sclerosis Journal. (2023) MSMilan2023 – Paper Poster

▪ A randomized double-blind clinical trial on safety and efficacy of tauroursodeoxycholic acid (TUDCA) as add-on treatment in patients affected by amyotrophic lateral sclerosis (ALS): the statistical analysis plan of TUDCA-ALS trial. Lombardo FL, Alegiani SS, Mayer F, Cipriani M, Lo Giudice M, Ludolph AC, McDermott CJ, Corcia P, Van Damme P, Van den Berg LH, Hardiman O, Nicolini G, Vanacore N, Dickie B, Albanese A, Puopolo M, TUDCA-ALS Study Group. Trials (2023)

▪ Tauroursodeoxycholic acid in patients with amyotrophic lateral sclerosis: The TUDCA-ALS trial protocol. Albanese A, Ludolph AC, McDermott C, Corcia P, Van Damme P, Van den Berg LH, Hardiman O, Rinaldi G, Vanacore N, Dickie B, TUDCA-ALS Study Group. Front Neurol (2022)

▪ Maternal Immune Activation Unseals Brain Vessels and Causes Intracerebral Hemorrhages in Offspring Rasile M, **Lauranzano E**, Faggiani E, Ravanelli M, Colombo F, Mirabella F, Corradini I, Focchi E, Giorgino T, Barajon I and Matteoli M. EMBO J (2022)

▪ Tauroursodeoxycholic acid in patients with amyotrophic lateral sclerosis: The TUDCA-ALS trial protocol Albanese A, Ludolph AC, McDermott C, Corcia P, Van Damme P, Van den Berg LH, Hardiman O, Rinaldi G, Vanacore N, Dickie B, TUDCA-ALS Study Group. Front Neurol (2022)

▪ Integrating primary astrocytes in a microfluidic model of the blood-brain barrier **Lauranzano E***, Rasile M, Matteoli M. (*corresponding author) Methods in Molecular Biology (2022)

▪ Neurological consequences of neurovascular unit and brain vasculature damages: potential risks for pregnancy infections and Covid-19-babies. Rasile M, **Lauranzano E**, Mirabella F and Matteoli M. FEBS (2021)

▪ Radiation and Adjuvant Drug-Loaded Liposomes target Glioblastoma Stem Cells and Trigger In-situ Immune Response Pizzocri M, Formicola B, Tamborini M, Rodighiero S, **Lauranzano E**, Francolini M, Gregori M, Re F, Zambelli V, Perin A, DiMeco F, Masserini M, Matteoli M, Passoni L. Neuro-Oncology Advances (2021)

▪ A microfluidic human model of blood brain barrier employing primary human astrocytes. **Lauranzano E**, Campo E, Pozzi D, Pizzocri M, Rasile M, Faggiani E, Matteoli M and Ruiz A. Advanced Biosystems (2019)

▪ Leukocyte derived microvesicles as disease progression biomarkers in slow progressing Amyotrophic Lateral Sclerosis patients Sproviero D, La Salvia S, Colombo F, Zucca S, Pansarasa O, Diamanti L, Costa A, Lova L, Giannini M, Gagliardi S, **Lauranzano E**, Matteoli M, Ceroni M, Malaspina A, Cereda C. Frontiers in Neuroscience (2019)

▪ Amyloid-β 1–24 C-terminal truncated fragment promotes amyloid-β 1–42 aggregate formation in the healthy brain. Mazzitelli S*, Filipello F*, Rasile M*, **Lauranzano E**, Starvaggi-Cucuzza C, Tamborini M, Pozzi D, Barajon I, Giorgino T, Natalello A and Matteoli M. Acta Neuropathologica Communications (2016)

▪ Identification of a novel agrin-dependent pathway in cell signaling and adhesion within the erythroid niche. Anselmo A, **Lauranzano E**, Soldani C, Ploia C, Angioni R, D'amico G, Sarukhan A, Mazzon A, Viola A. Cell Death & Differentiation (2016)

▪ Peptidylprolyl isomerase A governs TDP-43 function and assembly in heterogeneous nuclear ribonucleoprotein complexes. **Lauranzano E***, Pozzi S*, Pasetto L, Stucchi R, Massignan T, Mombrini M, Nardo G, Lunetta C, Corbo M, Mora G, Bendotti C, Bonetto V. Brain. (2015)

▪ Differences in protein quality control correlate with phenotype variability in 2 mouse models of familial amyotrophic lateral sclerosis. Marino M, Papa S, Crippa V, Nardo G, Peviani M, Cheroni C, **Lauranzano E**, Bonetto V, Poletti A, De Biasi S, Ferraiuolo L, Shaw PJ, Bendotti C. Neurobiology of Aging. (2015)

▪ Amyotrophic Lateral Sclerosis Multiprotein Biomarkers in Peripheral Blood Mononuclear Cells. Nardo G, Pozzi S, Pignataro M, **Lauranzano E**, Spano G, Garbelli S, Mantovani S, Marinou K, Papetti L, Monteforte M, Torri V, Paris L, Bazzoni G, Lunetta C, Corbo M, Mora G, Bendotti C, Bonetto V. PLoS One. (2011)

▪ Mutant prion protein expression is associated with an alteration of the Rab GDP dissociation inhibitor alpha (GDI)/Rab11 pathway. Massignan T, Biasini E, **Lauranzano E**, Veglianese P, Pignataro M, Fioriti L, Harris DA, Salmona M, Chiesa R, Bonetto V. Mol Cell Proteomics. (2010)

▪ Protective Effects of GLP-1 Receptor Agonists on TNF-alpha-Induced Apoptosis in INS-1 beta-Cells. Natalicchio A, De Stefano F, **Lauranzano E**, Laviola L, Perrini S, Leonardini A, Cignarelli A, Melchiorre M, Martemucci S, Caccioppoli C, Giorgino F. Diabetologia 50 (Suppl 1): S1-S538, 2007.

I authorise the use of my personal data in compliance with Legislative Decree 196/03.

Milano, 18/03/2024 Eliana Lauranzano