CURRICULUM VITAE ET STUDIORUM

Personal Details

Name and Surname: Elisabetta Pingitore

Place and Date of birth:

Actual job position: PhD Student, Molecular and Translational Oncology, Department of Experimental and Clinical Medicine, University of Catanzaro – Catanzaro, Italy

Contacts

Education

07/29/2024: Master's Degree in Molecular Biotechnology for Personalized Medicine (LM-9) – Magna Græcia University of Catanzaro, Catanzaro, Italy. Mark: 110/110 *cum laude* with Academic Distinction for Career Excellence. Thesis Title: *"Analysis of LAMP-2 and Lysosomes in Human Fibroblasts: A Cellular Model for Alzheimer's Disease?"*. Tutor: Prof. Laura Berliocchi, Associate Professor, Department of Health Sciences, University of Catanzaro, Italy and Visiting Researcher at the Center for Healthy Ageing, Department of Cellular and Molecular Medicine, University of Copenhagen, Denmark.

10/27/2022: Bachelor's Degree in Biotechnology (L-2) – Magna Græcia University of Catanzaro, Catanzaro, Italy. Mark: 110/110. Thesis Title: *"Molecular Analysis for the Detection of Mutations in Genes Causing Inherited Arrhythmogenic Cardiomyopathies"*. Tutor: Prof. Antonio Curcio, Associate Professor of Cardiovascular Diseases, University "Magna Graecia" of Catanzaro and Secretary General of the Italian Society of Cardiology (SIC). Co-tutor Prof. Rodolfo Iuliano, Associate Professor of Medical Genetics, Department of Health Sciences, University "Magna Graecia" of Catanzaro.

Courses

07/2025: Basic Course in Biostatistics, in-person training with passing the final exam. Official certificate of participation and completion (DD 47/2025, Prot. 121/2025) – Doctoral School, Magna Graecia University of Catanzaro, Catanzaro, Italy.

03/2025: Virtual Advanced School of Immunology (SoI) — *Italian Society of Immunology, Clinical Immunology and Allergology (SIICA)*. Online course structured in webinars and interactive sessions over four afternoons. Certificate of participation.

06/2021: *Lessons From Ebola: Preventing the Next Pandemic* (PH557x), online course with passing grade, organized by HarvardX, online learning initiative of Harvard University.

07/2019: English Language Study Program Intensive, English course focused on language improvement and intercultural communication – California State University of Northridge, Los Angeles, California, USA.

Research Experiences

2024-present: Ph.D. Student in Molecular and Translational Oncology (XL Cycle) – Magna Græcia University of Catanzaro, Catanzaro, Italy. Ph.D. Tutor: Prof. Enrico Iaccino. Ph.D. Course Coordinator: Prof. Pierosandro Tagliaferri. Main Project: "*Development of non-invasive diagnostic approaches for monitoring and molecular characterization of tumor progression in multiple myeloma, leukemias, and lymphomas."* Main Activities: phage display screening and peptide binder validation using ELISA and FACS analyses; immunological techniques, including Western Blot, DNA and RNA extraction, as well as specialized methods for the isolation of extracellular vesicles (EVs) such as ExoQuick protocols and size-exclusion chromatography. Characterization of EVs through immunocapture assays and the use of advanced high-sensitivity instrumentation, including ELLA, JESS, Leprechaun, Exoid, and Exodus systems. Presentation of research work at national and international conferences and publication of scientific papers.

2023-2024: Master thesis student, Department of Health Sciences, Magna Græcia University of Catanzaro, Catanzaro, Italy, Prof. Laura Berliocchi. Main Project: *Analysis of the pathophysiological mechanisms of Alzheimer's disease, with particular focus on the role of lysosomes, autophagy, and related cellular alterations.* Main Activities: fibroblast cell culture experiments and immunofluorescence analyses for the characterization of protein expression. Design and preparation of scientific posters for the presentation of research findings.

2023: Research Trainee at Center for Healthy Ageing, Department of Cellular and Molecular Medicine, University of Copenhagen, Denmark. Tutors: Prof. Lene Juel Rasmussen and Prof. Laura Berliocchi. Main Project: *Cellular and molecular biology of ageing, with particular attention to the role of lipid droplets in models of ageing and neuronal damage.* Main Activities: Optimization of immunostaining protocols for the detection of lysosomal markers and lipid droplets; support in image analysis and data presentation. Participation in seminars, workshops, and scientific conferences.

2021-2022: Bachelor thesis student, Department of Experimental and Clinical Medicine, Magna Græcia University of Catanzaro, Catanzaro, Italy. Tutors: Prof. Antonio Curcio and Prof. Rodolfo Iuliano. Main Project: *Investigation of cardiovascular diseases with the aim of identifying asymptomatic individuals at risk of developing sudden cardiac events.* Main Activities: clinical data collection of patients enrolled in the study within the Hemodynamics and Electrophysiology Unit, *Mater Domini University Hospital of Catanzaro*; DNA extraction and PCR analysis of patient samples within the Medical Genetics Unit, *Mater Domini Hospital of Catanzaro*.

Teaching Experiences

Academic year 2025/2026: Term-Contract Worker of Tutoring of Clinical Biochemistry (SSD BIOS-09/A) at the School of Pharmacy and Nutraceuticals – Magna Græcia University of Catanzaro, Italy.

Academic year 2023/2024: Term-Contract Worker of Tutoring of Clinical Biochemistry (SSD BIO/12) at the School of Pharmacy and Nutraceuticals – Magna Græcia University of Catanzaro, Italy.

Language Skills

Native language: Italian

Other languages: English (good), Spanish (school level)

Technical skills and competences

Molecular Biology: DNA and RNA extraction; agarose gel electrophoresis; limited experience with conventional PCR. Isolation and characterization of extracellular vesicles (EVs) using ExoQuick kits and IZON size-exclusion chromatography columns; operation of automated high-sensitivity instruments such as Exodus and Exoid systems. Experience with phage display screening and peptide binder validation.

Cell Biology: Experience in sterile cell culture techniques, maintenance, cryopreservation, and thawing of human fibroblasts, neuroblastoma (SH-SY5Y) cell lines, and hematological tumor cells (multiple myeloma, lymphoma, and leukemia). Immunostaining experiments performed on fibroblasts from healthy controls and Alzheimer's disease patients. Routine use of optical microscopy for cell observation; familiar with confocal microscopy principles and operation.

Immunology: Experience in Western Blot and various types of ELISA assays. Immunocapture of extracellular vesicle (EV) subpopulations using antibody-coated magnetic beads, followed by protein extraction and quantification through BCA assay and spectrophotometry. Use of automated high-sensitivity immunoassay platforms, including JESS (automated Western blot) and ELLA (automated ELISA), as well as Leprechaun for EV characterization via chip-based immunocapture. Basic knowledge of flow cytometry principles and data interpretation.

Software: Experience with ImageJ for image processing and GraphPad Prism, JASP, and Orange for statistical analysis and data visualization. Working knowledge of Excel and Google Sheets for data organization and quantitative analysis. Extensive experience with PowerPoint, Canva and BioRender for the design and delivery of scientific presentations, posters, and graphical materials. Experience with software associated with automated laboratory instruments, including ELLA, JESS, Exoid, and Leprechaun.

Scientific Societies Affiliation

- *Italian Association of Cell Culture (AICC)*
- *Italian Society of Clinical Biochemistry and Clinical Molecular Biology (SIBioC)*
- *European Federation of Clinical Chemistry and Laboratory Medicine (EFLM)*
- *Italian Association of Neuroimmunology (AINI)*
- *The American Association for Cancer Research (AACR)*

Scientific Conferences

1 – First author of the abstract entitled *"Unlocking BCMA in Aggressive Lymphomas: A Native Receptor-Targeted Peptide for Theranostic Applications"*, presented as poster at the Fifth AACR International Meeting: Advances in Malignant Lymphoma: From Discovery to Clinical Impact, June 24-27, 2026 – Philadelphia, Pennsylvania.

2 – Oral presentation entitled *"Phage Display-Derived Peptides for RNA-Centric Profiling of Tumor Extracellular Vesicle Subpopulations",* presented at the 14th Galenus International Workshop, "RNA Therapeutics: Taking Stockand a Glimpse into the Future", May 18-19, 2026 – Naples, Italy.

3 – Oral presentation entitled *"BCMA-Binding Peptides: A Dual Approach for Real-Time Monitoring and Targeting Tumor B Cells"*, presented at the 8th International Conference on Cancer Research and Oncology (Cancer Congress 2026), January 30-31, 2026 – Paris, France.

4 – First author of the abstract entitled *"BCMA: Dual Role as Disease Biomarker and Therapeutic Target in Lymphoproliferative Disorders"*, presented as poster at the 57th SIBioC National Congress – Laboratory Medicine, November 5-7, 2025 – Florence, Italy.

5 – First author of the abstract entitled *"BCMA-Binding Peptides: A Dual Approach for Real-Time Monitoring and Targeting Tumor B Cells"*, presented as poster and selected for oral presentation at the 37th AICC International Meeting – Trick or Treat?, October 27-29, 2025 – Florence, Italy.

6 – Oral presentation of the project idea *"PhageLink Diagnostics"* at the XVII Edition of the Start Cup Calabria 2025, October 24, 2025 – Catanzaro, Italy.

7 – First author of the abstract *"First Evidence of TGF-beta 1 Signature in Neuronally Derived Extracellular Vesicles: Potential Diagnostic and Therapeutic Applications for Parkinson's Disease and Progressive Supranuclear Palsy"*, presented as poster at the 26th IFCC-EFLM EuroMedLab Congress of Clinical Chemistry and Laboratory Medicine, May 18-22, 2025 – Bruxelles, Belgium.

8 – First author of the abstract entitled *"Dynamic Changes in BCMA Levels: Implications for Assessing Therapeutic Outcomes in Multiple Myeloma"*, presented as poster and selected for oral presentation at the 14th International Symposium on Minimal Residual Cancer, May 7-9, 2025 – Nice, France.

9 - Oral presentation entitled *"From Diagnosis to Therapy: Integration of BCMA-Specific Peptides in the Treatment of Hematological Tumors"* at the XIX Scientific Meeting organized by the Lilli Funaro Foundation, March 28-1, 2025 – Cosenza, Italy.

10 – Selected participant of the Galileo Festival Academy, an intensive program for university students focused on innovation, research, and science communication for the 12th Edition of the Galileo Festival of Science and Innovation, May 3-5, 2024 – Padua, Italy.

11 – Participation as a student volunteer at the 10th Aging Research and Drug Discovery Meeting, September 28-1, 2023 – Copenhagen, Denmark.

Awards and Honors

1 – *Best Question Award*, received during the Virtual Advanced School of Immunology (SoI) organized by the Italian Society of Immunology, Clinical Immunology and Allergology (SIICA), for the most insightful question posed during the scientific sessions, 3-6 March 2025.

2 – *Irene Mancuso Award for Best Presentation in Oncological Sciences*, awarded at the XIX Scientific Meeting organized by the Lilli Funaro Foundation, 28-1 March 2025 – Cosenza, Italy.

3 – *Galileo Festival Academy Scholarship*, awarded by the Galileo Festival of Science and Innovation, Padua, Italy 3-5 May 2024.

Scientific Publications

Number of publications: 4

H-Index: 2

Mimmi, S., Cristiani, C.M., Talarico, M., Tolomeo, A.M., Parrotta, E.I., Scaramuzzino, L., Crapella, V., **Pingitore, E.**, Iaccino, E., Cuda, G., Quattrone, A., Quattrone, A. (2025), Neurofilament Light Chain from Neuronally-Derived Extracellular Vesicles in differentiating Parkinson's Disease from Essential Tremor with Resting Tremor. Molecular Neurobiology 63, 24 (2026).

Mimmi, S., Parrotta, E.I., Tolomeo, A.M., Maisano, D., Crapella, V., **Pingitore, E.**, Fatima, K., Zimbo, A.M., Talarico, M., Cristiani, C.M., Scaramuzzino, L., Valente, D., Zannino, C., Cuda, G., Quattrone, A., Iaccino, E. and Quattrone, A. (2025), Neuronally-Derived Extracellular Vesicles Transforming Growth Factor Beta-1 Levels in Progressive Supranuclear Palsy. Mov Disord, 40: 1420-1426.

Cristiani, C.M.; Mimmi, S.; Parrotta, E.I.; Talarico, M.; Tolomeo, A.M.; **Pingitore, E.**; Fatima, K.; Vescio, B.; Scaramuzzino, L.; Crapella, V.; et al. Neuronally Derived Extracellular Vesicles' Oligomeric and p129-α-Synuclein Levels for Differentiation of Parkinson's Disease from Essential Tremor. Int. J. Mol. Sci. 2025, 26, 3819.

Malizia, B., Curcio, A., Rodolfo, I., Colao, E., **Pingitore, E.**, Cardia, G., Romano, L.R., Pasceri, E., Aquila, I., Indolfi, C. (2022). 820 VARIABLE EXPRESSIVITY OF SCN5A MUTATION IN A FAMILY WITH CARDIAC DYSFUNCTION AND SUSPECTED BRUGADA SYNDROME. European Heart Journal Supplements, 24(Supplement_K), suac121-410.

Catanzaro, Italy Signature

17/08/2026