

ALESSANDRA CALIENDO



PROFESSIONAL EXPERIENCE

05/04/2024 **Research fellow selected within the EU funded grant MUR PNRR M6/C2 - "Tumori rari"**

Research collaborator under 40, at the Institute of Endocrinology and Experimental Oncology "G.Salvatore" – National Research Council (IEOS-CNR), Naples, Italy, starting from September 2024, within the EU funded grant MUR PNRR M6/C2 (Project code: PNRR-TR1-2023-12377370). PI UO2-IEOS CNR, Dr Laura Cerchia. Project title "Locoregional administration of therapeutic hydrogels to overcome the blood-brain barrier and prevent glioblastoma recurrences".

15/09/2023-14/09/2024 **Contract researcher at IEOS-CNR**

Professional collaboration contract stipulated with the Institute of Urological Research, "I.R.C.C.S. San Raffaele Hospital", Milan, to accomplish research within the EU grant PHIRE (PI, Dr Massimo Alfano, San Raffaele Hospital). Associated-IEOS for research activities.

Project title: "Validazione di un vettore ad RNA in forma libera e coniugata a nano particelle".

1/03/2023-14/09/2023 **Post-graduate internship**

Post-graduate volunteer internship in the laboratory directed by Dr Laura Cerchia, at the IEOS-CNR, Naples, Italy.

March 2022-February 2023 **Formative Internship and Experimental Thesis Activity (Master's degree)**

Undergraduate internship for master thesis project in the laboratory of Dr Laura Cerchia at the IEOS-CNR, Naples, Italy.

1/09/2020-18/09/2020 **Formative Internship (Bachelor's degree)**

Curricular internship at the Department of Biology, University of Naples 'Federico II', Naples, Italy.

PERSONAL

Name

Address

Phone number

E-mail address

Date of birth

Birthplace

Gender

Nationality
Italiana

LinkedIn



EDUCATION

- November 2023 **Italian State Exam for Professional Qualification**
Qualification to practice the profession of Biologist at the University of Sannio, November 2023 session.
- 2021- 2023 **Master's degree in Biology, curriculum: biomolecular, LM-6**
University of Naples "Federico II". Thesis: "TIMP-1 overexpression mediates chemoresistance in triple-negative breast cancer cells".
Internal Advisor: Dr. Giuliana Napolitano
External Advisor: Dr. Laura Cerchia
Date of achievement: 23/02/2023
Final Grade: 110/110 *cum laude*
- 2017- 2021 **Bachelor's degree in General and Applied Biology, curriculum: molecular and cellular biology, L-13**
University of Naples "Federico II". Thesis: "Attività antimicrobica di un ceppo marino di *B. pumilus* contro *S. aureus*".
Thesis Advisor: Prof. Loredana Baccigalupi
Date of achievement: 19/02/2021
Final Grade: 110/110 *cum laude*



PARTICIPATION IN SCIENTIFIC PROJECTS

- February 2022-
To date **PARTICIPATION IN A SCIENTIFIC PROJECT ACCEPTED FOR FUNDING**
Project title: "Development of innovative drug-loaded and aptamer-targeted nanosystems for the treatment of triple-negative breast cancer". Type/funding: Investigator Grant AIRC IG 2019 funded by the Associazione Italiana per la Ricerca sul Cancro - n. project IG 23052. Principal Investigator: Dr. Laura Cerchia.



QUALIFICATION ACTIVITIES

- May 2024 **ATTUNE NXT BASIC TRAINING**
Participation at the Attune Nxt Basic Training course, IEOS-CNR, Naples, Italy. Field Application Scientist: Marco La Ferla.

2021 **TRAINING COURSE "PERCORSO FORMATIVO 24 CFU"**

Acquisition of 24 credits for teaching in lower secondary school and upper secondary school. Exams taken at the University of Naples "Federico II": experimental pedagogy (M-PED/04); school pedagogy (M-PED/01); psychology for teaching (M-PSI/01); cultural anthropology (M-DEA/01).

2021 **TRAINING COURSE "CORSO DI SICUREZZA NEI LUOGHI DI LAVORO"**

Learning course on Occupational Health and Safety at the University of Naples "Federico II".



AWARDS AND HONORS

January 2022 **Merit scholarship**

Merit scholarship for the third year of course for Bachelor's Degree at the University of Naples "Federico II".



LANGUAGE SKILLS

June 2016 **First Certificate in English**

Cambridge English Level 1 Certificate in ESOL International (First) at the University of Cambridge.

June 2014 **Preliminary English Test**

Cambridge English Entry Level Certificate in ESOL International (Entry 3) (Preliminary) at the University of Cambridge.

PUBLICATIONS

Camorani S, **Caliendo A**, Morrone E, Agnello L, Martini M, Cantile M, Cerrone M, Zannetti A, La Deda M, Fedele M, Ricciardi L, Cerchia L. Bispecific aptamer-decorated and light-triggered nanoparticles targeting tumor and stromal cells in breast cancer derived organoids: implications for precision phototherapies. J Exp Clin Cancer Res. 2024 Mar 26;43(1):92. doi: 10.1186/s13046-024-03014-x. PMID: 38532439; PMCID: PMC10964525.

Agnello L, d'Argenio A, **Caliendo A**, Nilo R, Zannetti A, Fedele M, Camorani S, Cerchia L. Tissue Inhibitor of Metalloproteinases-1 Overexpression Mediates Chemoresistance in Triple-Negative Breast Cancer Cells. Cells. 2023 Jul

7;12(13):1809. doi: 10.3390/cells12131809. PMID: 37443843; PMCID: PMC10340747.

CONGRESS PUBLICATIONS

Caliendo A, Agnello L, Pinto G, Ibarra L.E, Fedele M, Zannetti A, Cantile M, Amoresano A, Camorani S, Cerchia L. Targeting triple-negative breast cancer with a novel CD44 nuclease-resistant RNA aptamer. EACR 2024: Innovative Cancer Science, 10-13 June, 2024, Rotterdam, Netherlands. Mol Oncol. 2024 Jun; 18 Suppl. 1:pp 279. doi.org/10.1002/1878-0261.13683.

Camorani S, Ricciardi L, **Caliendo A**, Agnello L, Fedele M, Cantile M, Zannetti A, La Deda M, Cerchia L. Dual aptamer-decorated nanoparticles targeting tumor cells and stroma for precision phototherapies of breast cancer. EACR-AACR-IACR 2024 Conference: How to Bring Basic Science Discoveries to the Clinic, 27-29 February, 2024, Dublin, Ireland.

Agnello L, d'Argenio A, **Caliendo A**, Nilo R, Zannetti A, Fedele M, Camorani S, Cerchia L. TIMP-1 overexpression mediates chemoresistance in triple negative breast cancer cells. EACR 2023: Innovative Cancer Science, 12-15 June, 2023, Turin, Italy. Mol Oncol. 2023 Jun;17 Suppl 1:pp 288. doi: 10.1002/1878-0261.13471.

IN PERSON PARTICIPATION AT INTERNATIONAL MEETINGS

10-13 June 2024	Annual Congress of the European Association for Cancer Research (EACR) as presenting author in Rotterdam, Netherlands. Poster presented: "Targeting triple-negative breast cancer with a novel CD44 nuclease-resistant RNA aptamer". Caliendo A , Agnello L, Pinto G, Ibarra L.E, Fedele M, Zannetti A, Cantile M, Amoresano A, Camorani S, Cerchia L. Role: poster presenter.
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DISSEMINATION AND COMUNICATION

October 2024 **Supervisor in PCTO activities**

Participation in PCTO activities as supervisor at IEOS-CNR dedicated to high school students of Castellammare (NA).

May 2024 **AIRC volunteers to raise funds through the sale of azaleas**

Participation in the annual fundraising campaign AIRC to support cancer research through the sale of azaleas in Italian squares.

TECNICAL SKILLS

Maintenance of tumor cell lines in monolayer and in co-culture, generation of primary cultures and organoids from human biological material consisting of surgically removed breast tumor fragments, transient transfection, cell viability and proliferation assays, migration and invasion assays, evaluation of cells stemness potential, protein analysis (WB, immunoprecipitation), flow cytometry analysis, ELISA assays, confocal microscopy analysis, DNA and RNA extraction from human cells, nucleic acid amplification techniques (PCR, RT-PCR, Real-time RT-PCR).

