PERSONAL INFORMATION

Maria Luigia Ibba

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Sex Female | Date of birth December 3th 1992 | Nationality Italian

WORK EXPERIENCE

July 2021-
June 2022

Fellowship PRISAR2 - Proactive monitoRIng of cancer aS An alteRnative to surgery 2" (REF.GA 872860) (rif 4/2021)

Employer's name and locality: University of Naples Federico II, Naples.
Supervisor: Prof.ssa Gerolama Condorelli
Main activities and responsibilities: Development of a functional screening to identify a unique biomarker based upon aptamers will be employed as high affinity ligands and potential antagonists of disease-associated proteins.

Business or sector Research in molecular oncology and molecular biology

July 2020-
June 2021

Fellowship PRISAR2 - Proactive monitoRIng of cancer aS An alteRnative to surgery 2" (REF.GA 872860) (rif 6/2020)

Employer's name and locality: University of Naples Federico II, Naples.
Supervisor: Prof.ssa Gerolama Condorelli
Host institution for secodment: Percuros B.V. Zernikedreef 8, 2333 CL Leiden,The Netherlands,
Main activities and responsibilities: Development of a functional screening to identify a unique biomarker based upon aptamers will be employed as high affinity ligands and potential antagonists of disease-associated proteins.

Business or sector Research in molecular oncology and molecular biology

February 2020-
May 2020

Collaboration contract (Fondazione BuzzatTraverso)

Employer's name and locality: Istituto di Endocrinologia ed Oncologia Sperimentale "G. Salvatore" (CNR-IEOS), Via Pansini, 5 80131, Naples,
Supervisor: Dr Carla Lucia Esposito.
Main activities and responsibilities: Characterization of nucleic acid aptamers as tools for therapy and targeted delivery of RNA-based therapeutics in cancer.

Business or sector Research in molecular oncology and molecular biology

October 2019-
January 2020

Post graduate internship

Employer's name and locality: Istituto di Endocrinologia ed Oncologia Sperimentale "G. Salvatore" (CNR-IEOS), Via Pansini, 5-80131, Naples, Supervisor: Dr Carla Lucia Esposito.
Main activities and responsibilities: Characterization of nucleic acid aptamers as tools for therapy and targeted delivery of RNA-based therapeutics in cancer.

Business or sector Research in molecular oncology and molecular biology

October 2017-
September 2019

Undergraduate trainee

Employer's name and locality: University of Naples "Federico II".

Supervisor: Dr. Vittorio de Franciscis, IEOS-CNR.

Main activities and responsibilities: Characterization of nucleic acid aptamers as tools for therapy and targeted delivery of RNA-based therapeutics in cancer.

Business or sector Oncology and Molecular biology

EDUCATION AND TRAINING

November 2021-
On going

PhD in Biochemical and Biotechnological Sciences

Education or training organization's name: University of Campania Luigi Vanvitelli

Principal subjects covered: Biology, Biochemistry and Medical Biotechnology

October 2016-
September 2019

Master's Degree in Biotechnology Final Grade: 105 /110.

Education or training organisation's name: University of Naples "Federico II"

Principal subjects covered: Biotechnology, Molecular Biology, Chemistry, Cellular Biology.

Thesis: Characterization of a novel aptamers against Dna methyltransferase. (Internal supervisor G. Condorelli)

October 2011-
March 2016

Bachelor's Degree in Biotechnology Final Grade: 99 /110.

Education or training organization's name: "Centro di Biotecnologie A.O.R.N. Cardarelli " .

Principal subjects covered: Biotechnology, Molecular Biology, Chemistry, Cellular Biology, Biochemistry, Genetic

Thesis: La linea cellulare VX2: condizioni di coltura e test di tumorigenicità in vivo.

September 2006-July 2011

Scientific High School Diploma" Final Grade: 78/100

Education or training organization's name: "Liceo scientifico Margherita Di Savoia".
Principal subjects covered: Mathematic, Physic, Biology, Chemistry.

PERSONAL SKILLS

Mother tongue: Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B1	B1	B1	B1	B1
Spanish	A1	A1	A1	A1	A1

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
Common European Framework of Reference for Languages

Communication skills

Excellent verbal and written communication and aptitude to work in group developed during university and training experience. Good adaptability and communicative versatility.

Organisational / managerial skills

Great capacities of organization and management of research studies. Passion and excitement for research work. Excellent prioritisation skills and ability to reach the proposedaims with ambition and determination.

Digital competence

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Independent user	Independent user	Independent user	Independent user	Independent user

Levels: Basic user - Independent user - Proficient user
Digital competences - Self-assessment grid

- Good command of office suite (word processor, spread sheet, presentation software)
- Good command of Bio-informatics analyses: sequence analyses and alignment (ClustalW, Treeviewer), RNA/DNA secondary structure prediction software (RNAstructure, DNAsis), array analyses software (TmeV); MicroRNA database and prediction algorithm (miRBase, MiRanda, TargetScan, PicTar).

Technical Skills:

- Eukaryotic cell culture (stable cell lines, primary cultures and cancer stem cells), stable and transient transfection, infection; Molecular biology techniques (RNA extraction and purification, PCR, qRT-PCR, Transcription, RIP); Signal transduction and Protein analyses (WB, Immunoprecipitation); Cell migration and invasion assay; Flow cytometry; Cell viability (MTT, XTT) assays; Clonogenic assays; RNAi (si/shRNA, miRNA) screens; Tumor xenograft and tissue lysis; Bacterial cell culture and cloning techniques. Oligonucleotide florescent, radio-labeling and immunofluorescence; Microarray analyses; Combinatorial chemistry for aptamer selection.

Driving licence B

ADDITIONAL INFORMATION

Participation in scientific conferences

May 2018	Conference: New application for Gioblastoma treatment, Naples
October 2017	Conference on Down Syndrome: from therapy to diagnosis, Naples

Publications

- Nuzzo S, Iaboni M, **Ibba ML**, Rienzo A, Franzese M, Roscigno G, Affinito A, Petrillo G, Quintavalle C, Ciccone G, Esposito CL and Catuogno S. Selection of RNA aptamers targeting hypoxia in cancer. Frontiers in Molecular Biosciences Molecular Diagnostics and Therapeutics (Under review)

- **Ibba ML**; Ciccone G; Coppola G; Rotoli D; Fiorelli A; Catuogno S; Esposito CL. STAT3 silencing by an aptamer-based strategy hampers the crosstalk between NSCLC cells and cancer-associated fibroblasts. *Molecular Therapy-Nucleic Acids;* MTNA-D-22-00253. (Under review)

- Esposito CL, Autiero I, Li H, Bassal MA , Sandomenico A**, Ibba ML**, Wang D, Rinaldi L, Ummarino S, Gaggi G, Borchiellini M; Swiderski P, Ruvo M, Catuogno S, Ebralidze AK, Kortylewski M, de Franciscis V, Di Ruscio A. Targeted systematic evolution of an RNA platform neutralizing DNMT1 function and controlling DNA methylation. (Under review)

- **Ibba ML. ***, Ciccone G. *, Esposito CL., Catuogno S., Giangrande Paloma H., Advances in mRNA non-viral delivery approaches, Advanced Drug Delivery Reviews, Volume 177, 2021, 113930, DOI: 10.1016/j.addr.2021.113930. [* MLI AND GC equally contributed.]

- Esposito CL, Nuzzo S, **Ibba ML**, Condorelli G, Catuogno S, de Franciscis V. Combined Targeting of Glioblastoma Stem-Like Cells by Neutralizing RNA-Bio-Drugs for STAT3 Aptamer-STAT3 RNA bio-drug as tool to eradicate glioblastoma stem-like cells. Cancers 2020, 12, 1434; doi:10.3390/cancers12061434

- Santana-Viera L*, **Ibba ML*** , Rotoli D* , Catuogno S,and Esposito CL. Emerging Therapeutic RNAs for the Targeting of Cancer Associated Fibroblasts. Cancers 2020, 12, 1365; doi:10.3390/cancers12061365. [*LSV, MLI and DR eaqually contributed]

- Rotoli D, Santana-Viera L, **Ibba ML**, Esposito CL, and Catuogno S. Advances in Oligonucleotide Aptamers for NSCLC Targeting. Int. J. Mol. Sci. 2020, 21, 6075; doi:10.3390/ijms21176075

Meeting Abstract

- **Ibba ML** et al. Aptamer-Based Rna-Bio-Drugs For The Combined Therapy Of Gbm. Digital medicines at the intersection of sciences May, 30 2022 (on line). Presentation of poster.

- **Ibba ML***, Ciccone G.*, Coppola G., Petrillo G., Fiorelli A., Esposito CL, Catuogno S. Targeting of Cancer associated fibroblast in NSCLC by new aptamer-based approaches. "Target discovery for unmet medical needs and precision/personalized medicine". 4 April 2022 (online). [*IML and CG equally contributed]

- Esposito CL, Nuzzo S, **Ibba ML**, Grinev IP, Gorbushin A, Grek D, Voronkovskii I, Kolovskaya OS, Zamay TN, Morozov E, Koshmanova A, Narodov AA, Khorzhevskii VA, Erakhtin EE, Krat AV, Yakovlev A, Shesternya PA, Kichkailo AS, Condorelli G, Catuogno S, de Franciscis V. STAT3 targeting by an aptamer-based conjugate for glioblastoma multiforme therapy. Siberian Medical Review. 2021; (2):72-73. DOI: 10.20333/2500136-2021-2-72-73

- Ciccone G, **Ibba ML**, Coppola G, Petrillo G, Catuogno S, Esposito CL. New aptamer-based approaches for the targeting of cancer associated fi broblast in NSCLC. Siberian Medical Review. 2021; (2):83. DOI: 10.20333/2500136-2021-2-83.

- de Franciscis V., Catuogno S., **Ibba M.L.,** Condorelli G., Esposito C.L. A two aptamer-based selective targeting of GBM with therapeutic RNAs. (20AP) Delivery of Nucleic Acid Therapeutics March 15-20, 2020, Siracusa, Sicily, Italy. Abstract accepted for the meeting. Deleted due to Covid-19.

- Esposito C.L., Catuogno S., **Ibba M.L.**, Condorelli G., de Franciscis V. Targeting cancer cells with nucleic acid aptamers. Workshop: Towards Novel Anticancer Strategies: It's Time to Build a New Research Community. 18th November 2019, Naples, Italy.

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Data e Luogo

17/06/2022; Napoli

Firma

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