

PERSONAL INFORMATION

Federica Tambaro

EDUCATION AND TRAINING

October 2020 – To date

Ph.D Student

Thesis project: *Translational research approach to target sarcopenia: evaluation of microRNAs as biomarkers and the role of ANGPTL3 on skeletal muscle metabolism*

Supervisors: Prof. Marcello Arca and Prof. Maurizio Muscaritoli

Department of Precision Medicine - "La Sapienza" University of Rome – Rome, IT

January 2019

Master's degree in Neurobiology

Thesis project: *Epigenetic therapy as pharmacological approach for Duchenne muscular dystrophy: impact on muscular and neurological defects*

Supervisors: Dr. Chiara Mozzetta

"La Sapienza" University of Rome – Rome, IT

October 2012

Bachelor's degree in Cell and Molecular Biology

Dissertation project: *Isolation of microRNAs precursors from murine tissues.*

Supervisors: Dr. Hervé Seitz and Prof. Fabrizio Loreni

University of Rome "Tor Vergata" – Rome, IT

LBME-CNRS-Université "Paul Sabatier" – Toulouse, FR

July 2004

High School Diploma in Computer Science, Electronics and Systems

Istituto Tecnico Industriale Statale "Enrico Fermi" of Frascati – RM, IT

WORKING EXPERIENCE

October 2021 – To date

Ph.D Student

Department of Translational and Precision Medicine - "La Sapienza" University of Rome – Rome, IT

Supervisors: Prof. Marcello Arca and Prof. Maurizio Muscaritoli

"La Sapienza" University of Rome – Rome, IT

- Investigation of the role of ANGPTL3 in insulin-mediated response in skeletal muscle using a combination of different cellular and molecular methodologies.
- Identification of circulating and tissue-specific microRNAs in sarcopenia and cancer cachexia to use as a source of predictive biomarkers with a potential use in both the research and the clinical field.

November 2019 – July 2020

Post-MSc internship

CNR – Istituto di Biochimica e Biologia Cellulare (IBBC) of Monterotondo – RM, IT

Supervisors: Dr. Chiara Parisi

In vitro studies of gene regulation mediated by non-coding RNAs.

October 2017 – January 2019

MSc internship

Dipartimento di Biologia e Biotechnologie "Charles Darwin" – "La Sapienza" University of Rome – RM, IT

Supervisors: Dr. Chiara Mozzetta

Epigenetic therapies as approach to Duchenne Muscular Dystrophy (DMD). Evaluation of the role of histone deacetylase and methyltransferase inhibitors on neurological and muscular dysfunctions in mouse models of DMD.

February 2009 – August 2009

Erasmus project

Laboratoire de biologie moléculaire eucaryote (LBME) – CNRS – Toulouse, FR

Supervisors: Dr. Hervé Seitz

Multistep purification of small RNAs from different murine tissue aimed to identify miRNAs precursors though large scale sequencing libraries.

PERSONAL SKILLS

Mother tongue(s) ITALIAN

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
Replace with language	C2	C2	C2	C2	C2
ENGLISH					
Replace with language	B2	B2	B2	B2	B2
FRENCH					

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

Technical skills and competences

Molecular biology skills

Genomic DNA extraction and purification (mini and maxi- preps) and agarose gel electrophoresis. Isolation and purification of total RNA and miRNA using TRI- and kit-based protocols. PCR (conventional, RT-PCR) and qRT-PCR (Taqman based systems and Sybr), genotyping. Chromatin immunoprecipitation (ChIP). Plasmid preparation, ligation and transformation. Transfection of siRNA/plasmid/adenovirus. Protein purification assay, gel electrophoresis (SDS-PAGE and Western blot), interaction protein- protein by Immunoprecipitation, Proximity Ligation Assay and ELISA assay.

Cell biology skills

Multiple cell lines culture (C2C12, HepG2, HeLa, 3T3, HEK293) and primary cultures. Transient transfection, reporter assay, cell counting (Bruker chamber), fluorescent microscopy, cell cloning, cell proliferation assay.

Microscopy skills

Immunostaining, immunohistochemistry, light and confocal microscopy (Zeiss, Leica).

Animal skills

Animal colony management, husbandry and mice handling, anaesthesia and euthanasia, administer injection (ip injection, iv injection, and sc injection), and oral gavage. Stereotaxic surgery and guide cannulas implantation. Tail blood withdrawal, surgery, dissection and tissue collection. Tissue slicing (vibratome, microtome, cryostat).

Computer skills

MS Office, Adobe Photoshop CS, ImageJ, GraphPad Prism, Image Lab. Bioinformatics databases and programs for DNA and protein sequence analysis, RNA-seq analyses, GO analysis and primers and Taqman assays design (NCBI, ENTREZ, PUBMED, OMIM, PDB, SwissProt, ClustalW, BLAST, UCSC, miRbase, miRanda, TargetScan, Enrichr, Pahtner, David, String). SPSS for statistica analysis.

Organizational skills and competences

Ability to read, understand and follow SOPs.

- Strong attention to details, organised, excellent communication skills (written and verbal), problem solving skills, and ability to make timely decisions.

Driving licence B

ADDITIONAL INFORMATION

Presentations
 Projects
 Seminars
 Honours and awards
 References
 Citations
 Courses

List of publications

- Bini, S., Tramontano, D., Minicocci, I., Di Costanzo, A., Tambaro, F., D'Erasmus, L., & Arca, M. (2023). How ANGPTL3 Inhibition Will Help Our Clinical Practice?. *Current atherosclerosis reports*, 25(1), 19–29. <https://doi.org/10.1007/s11883-022-01076-w>
- Molfino, A., Ambrosani, F., Tambaro, F., Belli, R., Imbimbo, G., Udali, S., Moruzzi, S., Pattini, P., Ramaccini, C., Castagna, A., Muscaritoli, M., & Friso, S. (2023). Changes of gene expression in peripheral blood mononuclear cells of lung cancer patients with or without anorexia. *Clinical nutrition (Edinburgh, Scotland)*, 42(1), 9–17. <https://doi.org/10.1016/j.clnu.2022.11.013>
- Molfino, A., Belli, R., Imbimbo, G., Carletti, R., Amabile, M. I., Tambaro, F., di Gioia, C. R. T., Belloni, E., Ferraro, E., Nigri, G., & Muscaritoli, M. (2022). Evaluation of Browning Markers in Subcutaneous Adipose Tissue of Newly Diagnosed Gastrointestinal Cancer Patients with and without Cachexia. *Cancers*, 14(8), 1948. <https://doi.org/10.3390/cancers14081948>
- Bini, S., Pecce, V., Di Costanzo, A., Polito, L., Ghadiri, A., Minicocci, I., Tambaro, F., Covino, S., Arca, M., & D'Erasmus, L. (2022). The Fibrinogen-like Domain of ANGPTL3 Facilitates Lipolysis in 3T3-L1 Cells by Activating the Intracellular Erk Pathway. *Biomolecules*, 12(4), 585. <https://doi.org/10.3390/biom12040585>
- Belli, R., Ferraro, E., Molfino, A., Carletti, R., Tambaro, F., Costelli, P., & Muscaritoli, M. (2021). Liquid Biopsy for Cancer Cachexia: Focus on Muscle-Derived microRNAs. *International journal of molecular sciences*, 22(16), 9007. <https://doi.org/10.3390/ijms22169007>

Conferences

Poster Presentation:
 16th International Cachexia Conference taking place in Stockholm, 17-19 June 2023
 Title: **Skeletal muscle microRNAs profile in patients with gastrointestinal cancer**

Certifications

GCP/ICH E6 (R2) Good Clinical Practice (10/11/2022)

Memberships

Socio S.I.S.A – Società Italiana per lo Studio dell'Aterosclerosi