CURRICULUM VITAE of Simona Barbato

Simona Barbato, born in Torre del Greco (NA), 12th Jan 1986

- **EDUCATION:**

3rd May 2016 **Ph.D in Biochemical and Biotechnological Sciences** (XXVIII cycle, evaluation: *Excellent*)

PhD thesis: Modulation of tumor cell metabolism by the ATP synthase inhibitor (IF1) and role of miRNAs as drivers of drug resistance

8th March 2012 **Master Degree in Health Biology**, University of Bologna, with grade: *110/110 cum laude*

Dissertation tiltle: Evaluation of the effects of combined IIF and (-)-Epigallocatechin-3 Gallate on breast cancer cell lines.

23rd April 2009 **Bachelor's Degree in Biology** University of Florence, with grade: *110/110*

Dissertation tiltle: Evaluation of the pro-apoptotic in vivo effect of hERG1 potassium channel inhibitor drugs in a human lymphoblastic leukemia model.

June 2005 High school qualification Liceo Scientifico "G. Galilei" di Poppi (AR).

- **WORK EXPERIENCE**

April 2018- ongoing: Clinical Research Coordinator and Clinical Data Manager at the Institute of Hematology "L. & A. Seragnoli" Policlinico S. Orsola-Malpighi, Via Massarenti 9 Bologna, Italy. Therapeutic Area: Multiple Myeloma.

May 2016-May 2018: Post-Doc Researcher at the Department of Biomedical and Neuromotor Sciences (DIBINEM) of Bologna. Field of interest: Cancer metabolism.

April 2015-December 2015: Visiting fellow at Children's Hospital di Los Angeles (CHLA) - Division of Hematology, Oncology and Blood & Marrow Transplantation (SRT). Field of interest: miRNAs in cancer and in drug resistance.

January 2013-May 2016: PhD student at the Department of Biomedical and Neuromotor Sciences (DIBINEM) of Bologna. Field of interest: Cancer metabolism, hypoxia, mitochondria, bioenergetics.

June 2012-December 2012: External collaborator at the Department of Biochemistry, University of Bologna. Field of interest: Bioenergetics, mitochondrial pathophysiology.

March 2011-March 2012: Intern at the Department of Pathology of Bologna. Field of interest: Breast cancer.

September 2010-March 2011: Visiting fellow under Erasmus program at the Department of Biochemistry, Faculty of Biology, University of Barcellona (UB). Field of interest: Cancer cachexia.

September 2008-April 2009: Undergraduate intern at the Department of Pathology and Experimental Oncology of Florence. Field of interest: Human lymphoblastic leukemia (LAL)

- **TECHNICAL SKILLS**

Lab Experience: Cellular Biology, cell culture (primary and tumor cells) cellular tranfections, cloning. Molecular Biology, including Primer design, PCR, RT-PCR, Real-Time PCR. miRNAS evaluation and manipulation. Protein and nucleic acids extraction, 2D Electrophoresis and Western Blot (BN-PAGE and SDS-PAGE). RNA interference. Brightfield, Electronic and Fluorescence Microscopy. Immunohistochemistry. Flow Cytometry. Spectrophotometry and colorimetry. Fluorimetry. Polarographic techniques. Enzymatic assays. Luminometric assays (including Dual lucipherase assay). Mitochondrial isolation both from cells and extracted organs. Rodent handling (rats and mice). Inoculation of experimental tumors and pharmacological treatment. Organs harvesting.

Computer proficiency: Advanced use of Microsoft Office pack (Word, Excel, PPT), different version of Windows and MAC OS. Flow Cytometry-dedicated software analyzer (Flowing software 2.5.0; ModFit LT; Muse software – Merck-Millipore), miRNAs-dedicated software and databases (Miranda, microRNAs.org, miRbase, miRDB, miRwak2.0), BLAST and FASTA packages of sequence comparison, densitometric analysis software (Image Lab, Quantity One – BioRad).

Co-author of 4 peer-reviewed papers and 12 abstracts presented at national and international meetings.

Member of the Italian Society of Biochemistry and Molecular Biology (SIB) and of Italian Group of Bioenergetics and Biomembranes (GIBB). Since 2019, member of MM Working Group Techincal Committee.

According to art.10 of law decree no. 196 of 2003 and art. 13 GDPR (UE Regulation 2016/679), I give my consent to the processing of my personal data.

Dott.ssa Simona Barbato