

1. Marina Bacci

Curriculum Vitae

Date and place of birth: born on 16th June 1986 in Abbadia San Salvatore, Siena (Italy).

Work address: Department of Biomedical Sciences, University of Sassari. E-mail: mbacci@uniss.it

Current position:

Jan 2017 to now: 3 years AIRC funded post-doctoral fellowship

Education:

Nov 2013-Nov 2016: PhD programme in *Life Science and Biotechnology* at University of Sassari

February 2013: Master's degree course in Medical and Pharmaceutical Biotechnologies, Faculty of Medicine and Surgery, at University of Florence. Final Mark: 110/110 *cum laude*

April 2010: First level degree in Biotechnologies, Faculty of Medicine and Surgery, at University of Firenze.

Research experience:

The aim of the current research project is the evaluation of the role of lipid and amino acid metabolism in endocrine therapy resistance of oestrogen receptor positive (ER+) breast cancer. The PhD programme was a collaborative study between the Universities of Sassari and Florence. During this period, it was studied the metabolic reprogramming in the progression and endocrine therapy resistance of ER+ positive breast cancer, in particular the role of carbon central metabolism.

In the past years, during the internship of the Master degree course, I studied the crosstalk between signal of adhesion and those generated by the receptor for MCSF in macrophage. During my first level degree internship, I analysed the expression of CSF1-R in different breast cancer cell lines.

Technical skills and competences:

Cells culture primary and tumour cells; Proliferation, apoptosis, analysis and characterization of signalling pathways by SDS-PAGE and Western blot; Immunoprecipitation; Immunohistochemistry; Elisa assay; Subcellular extraction; Purification of DNA/RNA from cultured cells; PCR and RT-PCR; Protein silencing by siRNA; Radiolabelled metabolic fluxes analysis; Motility and Invasion assay (Boyden chambers and 3D Tumour Spheroid Invasion Assay); Zimography.

Membership: Società Italiana Cancerologia (SIC), European Association for Cancer Research (EACR), and Società Italiana Biochimica (SIB).

Meetings and conference:

2015: EACR-AACR-SIC special conference: Anticancer Drug Action and Drug Resistance: from Cancer Biology to the Clinic. June 2015, Firenze. (Poster presentation).

2016: EACR24 Congress in Manchester, 9-12 July 2016. (Poster presentation)

2016: 58th annual meeting of Italian cancer Society (SIC), Verona, Italy, 5-8 September 2016. (Poster presentation)

2017: EACR-AACR-SIC 2017 special conference: The Challenges of Optimizing Immuno- and Targeted Therapies: From Cancer Biology to the Clinic. June 24-27, Florence. (Poster presentation).

Awards:

EACR24 Meeting Bursary for the attendance at the EACR Congress in Manchester, July 2016. (Poster presentation).

FEBS2018: Meeting Bursary for the attendance at FEBS2018 advanced course in Budapest, April 2018. (Poster presentation)

Publications:

- Bacci M, Giannoni E, Fearn A, Ribas R, Gao Q, Taddei ML, Pintus G, Dowsett M, Isacke CM, Martin LA, Chiarugi P, Morandi A. miR-155 Drives Metabolic Reprogramming of ER+ Breast Cancer Cells Following Long-Term Estrogen Deprivation and Predicts Clinical Response to Aromatase Inhibitors. *Cancer Research* 2016 Mar 15;76(6):1615-26.

- Digiacomo G, Tusa I, Bacci M, Cipolleschi MG, Dello Sbarba P, Rovida E. Fibronectin induces macrophage migration through a SFK/FAK/CSF-1R pathway. *Cell Adhesion & Migration* 2016 Sept 02.