

# VALENTINA GAMBINI

## EDUCATION /RESEARCH EXPERIENCES

### **May 2017-present Post-Doctoral Fellowship**

Research on "Evaluation of FS-102 efficacy against HER2-driven breast carcinogenesis",  
School of Biosciences and Veterinary Medicine, Experimental Biology Laboratory,  
*University of Camerino, Camerino (MC) Italy*

### **Jan 2014-Jan 2017 PhD in "Life and Health Sciences, Molecular and Cellular Biotechnology"**

Thesis on the evaluation of "Azolate Gold(I) Phosphane Complexes and innovative lipid delivery systems for the treatment of Basal Like Breast Cancer". In addition, during my PhD course I worked on several research projects ranging from resistance in HER2-positive breast cancer to lipofection.

School of Biosciences and Veterinary Medicine, Experimental Biology Laboratory,  
*University of Camerino, Camerino(MC) Italy*

### **Nov 2013 Qualifying examination to practice the profession of Biologist**

*University of Camerino, Camerino(MC) Italy*

### **Apr 2012- Oct 2013 Research Fellowship "Pio Sodalizo dei Piceni"**

Development of the project entitled "Study of trastuzumab resistance and evaluation of the efficacy of innovative antitumoral gene vaccination against HER2 in Delta-16HER2 preclinical model of breast cancer",

School of Biosciences and Veterinary Medicine, Experimental Biology Laboratory  
*University of Camerino, Camerino (MC) Italy*

### **Sept 2004-July 2008 Master Degree in Medical Biotechnology, 110/110 with honors**

Experimental thesis in Pharmacology, Toxicology and Chemotherapy on the "Characterization of CD4<sup>+</sup> expressing GITR subpopulations in healthy donors and patients with autoimmune diseases"

*University of Perugia, Perugia, Italy*

### **Sept 2002-Feb 2005 Bachelor's degree in Biotechnology, *Medical Curriculum*, 110/110 with honors**

Experimental thesis in Pharmacology, Toxicology and Chemotherapy on the " Role of GILZ (Glucocorticoid-Induced Leucine Zipper) in the process of differentiation of muscle precursors",

*University of Perugia, Perugia, Italy*

## TECHNICAL/PERSONAL SKILLS

### TECHNICAL

Competence in DNA, RNA and proteins extraction from tissue and cell cultures, Molecular Biology (PCR, WB, ELISA), Cellular Biology (in vitro cell culture techniques, establishment of cancer cell line, proliferation, migration, invasion assays, cytofluorimetric analysis, fluorescent microscopy), handling techniques of laboratory animals, genetic screening of transgenic models, cellular homo/xenotransplantation, *in vivo* pharmacological treatment. Good knowledge and usage of most common scientific databases (PubMed-NCBI, Google Scholar, Scopus, Web of Science) and softwares for data and statistical analysis (FLOwJO, GraphPad).

### LANGUAGES

Mother tongue: Italian, Other language: English

### ORGANIZATIONAL

Attitude for problem solving and capacity for working in teams, good ability in coordinating and managing work built up and reinforced during my PhD.

### ACTIVITIES

Tutoring of bachelor and master degree students, teaching assistant in "Biology of Cancer and biomolecular therapeutic agents"; "Clinical biochemistry and molecular applications in biomedicine"; "Molecular genetics, genetics of microorganism and microbial biotechnology" courses.

## ABSTRACTS/POSTERS

**XXXVII advanced course of medicinal chemistry and "E.Duranti" national seminar for PhD students, Urbino, 2-6 July 2017**

Wang J, Tilio M, Gambini V, Lezzi M, Poli V, Marchini C and Amici A

Poster entitled "*Conditional gene ablation of STAT3 reveals signalling requirements for breast carcinogenesis in Δ16HER2 mice*".

**XLIII National Conference of Inorganic Chemistry (SCI), Camerino, 9-12 September 2015:**

Galassi R, Oumarou CS, Ramadori AT, Pucciarelli S, Gambini V, Tilio M, Marchini C, Amici A

poster entitled "*Azolate/phosphane gold(I) compounds in antiproliferative therapy: a new frontier for the azolate gold(I) chemistry*".

**XIV Annual Meeting of PharmacoBioMetallics (BioMet 14), Pisa, 24-25 October 2014:**

Galassi R, Camille SO, Pucciarelli S, Gambini V, Tilio M, Marchini C, Amici A

poster entitled "*Azolate gold(I) phosphane complexes as innovative therapies for the treatment of HER2-driven breast cancer*".

**56th Annual Meeting of the Italian Cancer Society (SIC), Ferrara, 11-13 September 2014: 2 posters**  
Garulli C, Kalogris C, Pietrella L, Bartolacci C, Andreani C, Gambini V, Tilio M, Zabaleta ME, Marchini C, Amici A, poster entitled "*Bone Morphogenetic Proteins signalling promotes cancer initiating cells phenotype*".

Kalogris C, Garulli C, Pietrella L, Bartolacci C, Andreani C, Gambini V, Tilio M, Zabaleta ME, Iezzi M, Belletti B, Marchini C, Amici A, poster entitled "*SRC inhibition blocks Δ16HER2-driven carcinogenesis*".

**2nd meeting Gene Vaccination in Cancer, Ascoli Piceno, 9-11 October 2013 : 2 posters**

Andreani C, Curcio C, Bartolacci C, Pietrella L, Garulli C, Kalogris C, Zabaleta ME, Gambini V, Tilio M, Iezzi M, Occhipinti S, Marchini C, Amici A, poster entitled "*The rat/human chimera vaccine HuRT displays the unique ability to hamper autochthonous mammary carcinogenesis in Δ16HER2 mice*".

Bartolacci C, Andreani C, Pietrella L, Garulli C, Kalogris C, Zabaleta ME, Gambini V, Tilio M, Iezzi M, Marchini C, Amici A, poster entitled "*DNA vaccination controls Δ16HER2-driven tumorigenicity*".

**XV National Meeting AIBG, Arcavacata di Rende (CS), 27-28 September 2013:**

Bartolacci C, Andreani C, Pietrella L, Garulli C, Kalogris C, Zabaleta ME, Gambini V, Tilio M, Lasconi C, Curcio C, Belletti B, Marchini C, Amici A, poster entitled "DNA vaccines against HER2 control  $\Delta 16$ HER2-driven tumorigenicity".

**55th Annual Meeting of the Italian Cancer Society, Catanzaro, 23-26 September 2013 :**

Andreani C, Bartolacci C, Pietrella L, Garulli C, Kalogris C, Zabaleta ME, Gambini V, Tilio M, Lasconi C, Curcio C, Marchini C, Amici A, poster entitled "*Delta16HER2 mice: a new breast cancer model for testing HER2- targeted therapies*".

## CONFERENCES AND COURSES

XXXIV National Conference of Cytometry, Lucca, 22-25 September 2015

2nd meeting Gene Vaccination in Cancer, Ascoli Piceno 9-11 October 2013

1st meeting Gene Vaccination in Cancer, Ascoli Piceno 15-17 September 2011

## SCIENTIFIC PUBLICATIONS

Astolfi P, Giorgini E, Gambini V, Rossi B, Vaccari L, Vita F, Francescangeli O, Marchini C, Pisani M, "Lyotropic Liquid-Crystalline Nanosystems as Drug Delivery Agents for 5-Fluorouracil: Structure and Cytotoxicity", *Langmuir*. 2017 Oct 31;33(43):12369-12378, IF:3.833.

Amici A, Caracciolo G, Digiaco L, Gambini V, Marchini C, Tilio M, Capriotti AL, Colapicchioni V, Matassa R, Familiari G, Palchetti S, Pozzi D, Mahmoudi M, Laganà A, "In vivo protein corona patterns of lipid nanoparticles", *RCS Adv* 2017 Jan 04; 7(2):1137-1145, IF:3.108

Palchetti S, Pozzi D, Marchini C, Amici A, Andreani C, Bartolacci C, Digiaco L, Gambini V, Cardarelli F, Di Rienzo C, Peruzzi G, Amenitsch H, Palermo R, Screpanti I, Caracciolo G, "Manipulation of lipoplex concentration at the cell surface boosts transfection efficiency in hard-to-transfect cells", *Nanomedicine* 2017 Feb;13(2):681-691, IF:5.720

Tilio M\*, Gambini V\*, Wang J, Garulli C, Kalogris C, Andreani C, Bartolacci C, Elexpuru Zabaleta M, Pietrella L, Hysi A, Iezzi M, Belletti B, Orlando F, Provinciali M, Galeazzi R, Marchini C, Amici A, "Irreversible inhibition of  $\Delta 16$ HER2 is necessary to suppress  $\Delta 16$ HER2-positive breast carcinomas resistant to Lapatinib", *Cancer Lett*. 2016 Oct 10;381(1):76-84, IF:6.375

Montani M, Pazmay GV, Hysi A, Lupidi G, Pettinari R, Gambini V, Tilio M, Marchetti F, Pettinari C, Ferraro S, Iezzi M, Marchini C, Amici A, "The water soluble ruthenium(II) organometallic compound [Ru(p-cymene)(bis(3,5 dimethylpyrazol-1-yl)methane)Cl]Cl suppresses triple negative breast cancer growth by inhibiting tumor infiltration of regulatory T cells", *Pharmacol Res*. 2016 May;107:282-90, IF:4.480

Colapicchioni V, Tilio M, Digiaco L, Gambini V, Palchetti S, Marchini C, Pozzi D, Occhipinti S, Amici A, Caracciolo G, "Personalized liposome-protein corona in the blood of breast, gastric and pancreatic cancer patients", *Int J Biochem Cell Biol*. 2016 Jun;75:180-7, IF:3.505

Kalogris C, Garulli C, Pietrella L, Gambini V, Pucciarelli S, Lucci C, Tilio M, Elexpuru Zabaleta M, Bartolacci C, Andreani C, Giangrossi M, Iezzi M, Belletti B, Marchini C, Amici A, "Sanguinarine suppresses basal-like breast cancer growth through dihydrofolate reductase inhibition", *Biochem Pharmacol*. 2014 Aug 1;90(3):226-34, IF:4.581

Camerino, 22/12/1

Firma