

PERSONAL INFORMATION

Junbiao Wang

EDUCATION AND TRAINING

April 2019 — Present

Post-doctoral fellowship

University of Camerino (Italy)

Fondazione Umberto Veronesi Year 2019 "Precise treatment against Δ 16HER2 positive breast cancer with phage vaccine and CAR-NK strategy"

Mar. 2018 – Mar. 2019

Post-doctoral fellowship

University of Camerino (Italy)

"Sperimentazione farmacologica *in vitro* e *in vivo*" (Pharmacological experiment *in vitro* and *in vivo*)

Nov. 2014 – Feb. 2018

Ph.D. course in "Life and Health Sciences: Molecular and Cellular Biotechnology".

University of Camerino (Italy)

- The role of STAT3 in breast cancer signalling pathways
- Analysis of anti-breast cancer activity *in vitro* and *in vivo* of new compounds.

Jan. 2014 – June 2014

Second Master Degree in Pharmacognosy.

July 2010 –Sept. 2011

Jilin Agricultural University (China). Final grade: 85.3 / 100

- Learning of advanced Natural Medicinal Chemistry and Experiment
- Resource Science of Pharmacognosy and Modern Pharmacognosy and Pharmacology

Oct. 2011 – Dec. 2013

Master Degree in Biological Sciences, curriculum: Molecular Diagnostic and Biotechnology.

University of Camerino (Italy). Final grade: 110 / 110 cum laude (with honour)

- Molecular interactions and the chemical and biological mechanisms involved in the transformational processes of the biological components;
- Structure, activity, genetics and differentiation processes of eukaryotic and prokaryotic cells;
- Medical, biotechnological, ecological and forensic applications of molecular biology;
- Set-up of diagnostic protocols in the clinical, nutritional or environmental sphere.

Sep. 2006 –June 2010

Bachelor Degree in Pharmaceutical science

Changchun University of Traditional Chinese Medicine (China). Final Mark 91 / 100

- Solid basis in pharmacy, physics, mathematics, chemistry, statistic and computer sciences

- Skills needed in producing medicine for applications in industry and environment, and for the production, analysis and quality control of pharmaceutical products.

RESEARCH EXPERIENCE

Mar. 2018 – Present	Post-doctoral fellowship, University of Camerino.
Nov. 2014 – Feb. 2018	PhD position in School of Biosciences and Veterinary, University of Camerino. Research activity is about "Conditional gene ablation of Stat3 reveals signalling requirements for breast carcinogenesis in Δ 16HER2 mice" and "Validation of traditional Chinese herbal remedies as effective treatments against breast cancer".
Mar. 2013 – Dec. 2013	Stage for master degree thesis in School of Biosciences and Veterinary, University of Camerino. Tested the potential anticancer activity of DNA vaccines (v(pVAX-hECTM, pVAX- Δ 16ECTM and pVAX-HuRT) against HER2-possitive mice.
July 2010 – Sept. 2011	Laboratory training in the Chinese Medicine Material College of Jilin Agricultural University (China). Experiment is about extraction, separation and purification of the chemical constituents from an herb <i>Physalis alkekengi</i> . Separated them by chromatography, identified their chemical structures, tested their activities.
Mar. 2010 – June 2010	Internship in Institute of Ginseng Science in Changchun University of Traditional Chinese Medicine. Research activity is to quantify polysaccharides, oligosaccharides (Mol.wt <3500) as well as sugar, uronic acid, protein, starch extracted in Ginseng.

PERSONAL SKILLS

	Chinese
Mother tongue	
Other language(s)	
	English
	Italian
Technical skills and competences	<p>Molecular /Cell Biology/ Animal Model Experiments/ Biochemistry techniques:</p> <ul style="list-style-type: none"> - Mammalian cell culture (<i>in vitro</i>), isolation of mammary epithelial cells and fibroblasts from mouse tumor. - Molecular biology techniques such as PCR, MTT, Western Blotting. - Very good at animal model experiments (<i>in vivo</i>), involving the usage of mice as models of breast cancer, xenografting and transplantation techniques, husbandry, generation of transgenic lines,

gavage, intraperitoneal, intramuscular or subcutaneous or intravenous injection.
 - Tumor monitor, mouse autopsy and micro-dissection of tumor at different developmental stages
 Tutor of Bachelor and Master students at University of Camerino
 Calligraphy teacher at International Chinese School of Marche

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

- good command of statistical analysis software (Prism)
- good command of the main used databases (PubMed)
- good command of office suite (word processor, spread sheet, presentation software)
- good command of photo editing software gained as an amateur photographer

ADDITIONAL INFORMATION

Granted Project

1. Research grants "Post-doctoral Fellowship" Fondazione Umberto Veronesi Year 2019.
2. Doctoral Candidates Research Grants (PI): Validation of traditional Chinese herbal remedies as effective treatments against breast cancer. € 16,600.00 (Dec 2016)

Summer Schools/Conferences

1. 6th National Breast Cancer Youth Expert Forum, Tianjin, China, May. 3-5, 2018
2. European School of Medicinal Chemistry ESMEC. Urbino, Italy. July 2-6, 2017
3. 28th EROTC-NCI-AACR "Molecular Targets and Cancer Therapeutics". Munich, Germany, Nov. 29 - Dec. 2, 2016
4. Gene Vaccination in Cancer, Ascoli Piceno, Italy, Oct. 9-11, 2013.

Publications

1. Falconi M, Giangrossi M, Zabaleta ME, **Wang J**, Gambini V, Tilio M, Bencardino D, Occhipinti S, Belletti B, Laudadio E, Galeazzi R. A novel 3' -tRNA^{Glu}-derived fragment acts as a tumor-suppressor in breast cancer by targeting nucleolin. *The FASEB Journal*. 2019 Sep 27:fj-201900382RR.
2. Bartolacci, C., Andreani, C., Curcio, C., Occhipinti, S., Massaccesi, L., Giovarelli, M., Galeazzi, R., Iezzi, M., Tilio, M., Gambini, V. and **Wang, J.**, Marchini C, Amici A, 2018. Phage-Based Anti-HER2 Vaccination Can Circumvent Immune Tolerance against Breast Cancer. *Cancer immunology research*, 6(12), pp.1486-1498.
3. Gambini, V., Tilio, M., Maina, E.W., Andreani, C., Bartolacci, C., **Wang, J.**, Iezzi, M., Ferraro, S., Ramadori, A.T., Simon, O.C. and Pucciarelli, S., 2018. In vitro and in vivo studies of gold (I) azolate/phosphane complexes for the treatment of basal like breast cancer. *European journal of*

medicinal chemistry.

4. 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. (2016) Irreversible inhibition of $\Delta 16\text{HER2}$ is necessary to suppress $\Delta 16\text{HER2}$ -positive breast carcinomas resistant to Lapatinib. *Cancer Letters*, 381(1): 76-84. **(First co-author)**
5. "Conditional gene ablation of Stat3 reveals signalling requirements for breast carcinogenesis in $\Delta 16\text{HER2}$ mice". **Conference abstract** in European School of Medicinal Chemistry. Jul 2017
6. **Wang, J.**, Zheng Y., The progress of anti-tumor DNA vaccine. *Jilin Agriculture (Review, Chinese Journal)*, 329(8):84-85.2014 (First author)
7. **Wang, J.**, Zheng Y., Study on Antioxidative Properties of Different Fractions from *Acanthopanax Senticosus* (Rupr.etMaxim.) Harms Leaves. *Gensing Research (Chinese Journal)*, 24, 11-15, 2012 (First author).
8. **Junbiao Wang**, Romilde Iannarelli, Martina Tilio, Valentina Gambini, Aleix Marti Navia, Claudia Santinelli, Michela Buccioni, Gabriella Marucci, Laura Serini, Filippo Maggi, Stefano Dall'Acqua, Stefania Sut, Cristina Marchini, Augusto Amici. Acetylshikonin from *Lithospermum erythrorhizon* suppresses breast cancer growth in $\Delta 16\text{HER2}$ mice. (Under writing)