

Carmela Spagnuolo

Short CV

Nationality: Italian, born February 7th, 1981; Avellino, Italy

Current position

- Research Scientist (TD) at ISA, Institute of Food Sciences, National Research Council (CNR), Avellino (Italy)

Education and training

- December 2007-2011 Doctorate Programme in Medical Oncology, Surgery and Clinical Immunology *Second University of Naples, Italy*
- February 2007 Biological Sciences Academic degree, *University of Sannio, Benevento, Italy*

Work experience

- June 2012-August 2014 Fellowship (public selection) at the Institute of Food Sciences (National Research Council, Avellino, Italy) on a MERIT (RBNE08ZZN7) project entitled *"Development of new pharmacological strategies for the treatment of cognitive dysfunction associated with aging and psychiatric disorders, with specific reference to psychosis and neurodegenerative diseases"*
- September-December 2011 Contract at the Institute of Food Sciences (National Research Council, Avellino, Italy) on a project entitled: *"Hormetic effects of phytochemicals in cellular models"*
- July-December 2010 Fellowship (public selection) at the Institute of Food Sciences (National Research Council, Avellino, Italy) on a project entitled *"Study of molecular mechanisms of toxicity of polyphenols"*
- January-September 2009 Fellowship (public selection) at the Institute of Food Sciences (National Research Council, Avellino, Italy) on a project entitled: *"Acute and chronic toxicity of food-derived molecules on human cell lines"*
- June-December 2008 Contract at the Institute of Food Sciences (National Research Council, Avellino, Italy) on a project entitled: *"Exploiting polyphenol sensitivity in primary chronic lymphocytic leukemia"*

Visiting Scientist

- Scientific-collaboration CNR (Italy)-SAV (Slovakia) with Dr. Katarina Bauerova
Participation in the activity of the project: *"Phytochemical in ameliorating rheumatoid arthritis therapy: from preclinical studies to clinical applications (PhytoArt)"*
- Scientific collaboration with Dr. Kosuke Yusa at Wellcome Trust Sanger Institute Genome Campus, Hinxton, Cambridgeshire CB10 1SA, United Kingdom
- Lifelong Learning Programme/ Erasmus Placement 2009/10 (public selection) Second University of Naples, Italy. Collaboration with Dr. Marc Diederich, Fondation Recherche sur le Cancer et les Maladies du Sang Laboratoire de Biologie Moléculaire et Cellulaire du Cancer (LBMCC) Hopital Kirchberg, 9, rue Edward Steichen, L-2540 Luxembourg

Selected publications (2010-2015)

Spagnuolo C, Napolitano M, Tedesco I, Moccia S, Russo GL. Neuroprotective role of natural polyphenols. *Accepted on Current Topics in Medicinal Chemistry*. 2015

Block KI, Gylleanhaal C, Lowe L,.....**Spagnuolo C**,.....(187 authors). A Broad-Spectrum Integrative Design for Cancer Therapy, *Capstone paper accepted on Seminars in Cancer Biology* 2015

Spagnuolo C, Russo GL, Orhan IE, Habtemariam S, Daglia M, Sureda A, Nabavi SF, Devi KP, Loizzo MR, Tundis R, Nabavi SM.

Genistein and cancer: current status, challenges, and future directions. *Adv Nutr*. 2015 Jul 15;6(4):408-19. doi: 10.3945/an.114.008052.

PMID: 26178025

Tedesco I*, Carbone V*, **Spagnuolo C***, Minasi P, Russo GL.

Identification and Quantification of Flavonoids from Two Southern Italian Cultivars of *Allium cepa* L., Tropea (Red Onion) and Montoro (Copper Onion), and Their Capacity to Protect Human Erythrocytes from Oxidative Stress. *J Agric Food Chem*. 2015 Jun 3;63(21):5229-38. doi: 10.1021/acs.jafc.5b01206.

PMID: 25965971

Mohammad RM, Muqbil I, Lowe L, Yedjou C, Hsu HY, Lin LT, Siegelin MD, Fimognari C, Kumar NB, Dou QP, Yang H, Samadi AK, Russo GL, **Spagnuolo C**, Ray SK, Chakrabarti M, Morre JD, Coley HM, Honoki K, Fujii H, Georgakilas AG, Amedei A, Niccolai E, Amin A, Ashraf SS, Helferich WG, Yang X, Boosani CS, Guha G, Bhakta D, Ciriolo MR, Aquilano K, Chen S, Mohammed SI, Keith WN, Bilsland A, Halicka D, Nowsheen S, Azmi AS.

Broad targeting of resistance to apoptosis in cancer. *Semin Cancer Biol*. 2015 Apr 28. pii: S1044-579X(15)00016-4. doi: 10.1016/j.semcancer.2015.03.001. [Epub ahead of print]

PMID: 25936818

Russo GL, Russo M, **Spagnuolo C**.

The pleiotropic flavonoid quercetin: from its metabolism to the inhibition of protein kinases in chronic lymphocytic leukemia. *Food Funct*. 2014 Oct;5(10):2393-401. doi: 10.1039/c4fo00413b.

PMID: 25096193

Spagnuolo C, Tedesco I, Volpe MG, Bilotto S, Russo M, Russo GL

Cytotoxic Properties of Lyophilized Beers in a Malignant Cell Line

Food and Nutrition Sciences 2014, 5:45-51 (2014). doi.org/10.4236/fns.2014.51006

Russo GL, Russo M, **Spagnuolo C**, Tedesco I, Bilotto S, Iannitti R, Palumbo R.

Quercetin: a pleiotropic kinase inhibitor against cancer.

Cancer Treat Res. 2014;159:185-205. doi: 10.1007/978-3-642-38007-5_11.

PMID: 24114481

Tedesco I, Russo M, Bilotto S, **Spagnuolo C**, Scognamiglio A, Palumbo R, Nappo A, Iacomino G, Moio L, Russo GL.

Dealcoholated red wine induces autophagic and apoptotic cell death in an osteosarcoma cell line.

Food Chem Toxicol. 2013 Oct;60:377-84. doi: 10.1016/j.fct.2013.07.078.

PMID: 3933363

Russo M*, **Spagnuolo C***, Volpe S, Tedesco I, Bilotto S, Russo GL.

ABT-737 resistance in B-cells isolated from chronic lymphocytic leukemia patients and leukemia cell lines is overcome by the pleiotropic kinase inhibitor quercetin through Mcl-1 down-regulation.

Biochem Pharmacol. 2013 Apr 1;85(7):927-36. doi: 10.1016/j.bcp.2013.01.011.

PMID: 23353698

Spagnuolo C, Russo M, Bilotto S, Tedesco I, Laratta B, Russo GL.

Dietary polyphenols in cancer prevention: the example of the flavonoid quercetin in leukemia. Ann N Y Acad Sci. 2012 Jul;1259:95-103. doi: 10.1111/j.1749-6632.2012.06599.x.

PMID: 22758641

Tedesco I*, **Spagnuolo C***, Russo M, Iannitti R, Nappo A, Russo GL.

Protective Effect of γ -Irradiation Against Hypochlorous Acid-Induced Haemolysis in Human Erythrocytes.

Dose Response. 2012 Nov 16;11(3):401-12. doi: 10.2203/dose-response.12-025.

PMID: 3983667

Russo M*, **Spagnuolo C***, Tedesco I, Bilotto S, Russo GL.

The flavonoid quercetin in disease prevention and therapy: facts and fancies. Biochem Pharmacol. 2012 Jan 1;83(1):6-15. doi: 10.1016/j.bcp.2011.08.010. Epub

PMID: 21856292

Spagnuolo C, Cerella C, Russo M, Chateauvieux S, Diederich M, Russo GL

Quercetin downregulates Mcl-1 by acting on mRNA stability and protein degradation. Br J Cancer. 2011 Jul 12;105(2):221-30. doi: 10.1038/bjc.2011.229.

PMID: 21750559

Russo M, **Spagnuolo C**, Volpe S, Mupo A, Tedesco I, Russo GL.

Quercetin induced apoptosis in association with death receptors and fludarabine in cells isolated from chronic lymphocytic leukaemia patients. Br J Cancer. 2010 Aug 24;103(5):642-8. doi: 10.1038/sj.bjc.6605794.

PMID: 20648016

Russo M*, **Spagnuolo C***, Tedesco I, Russo GL.

Phytochemicals in cancer prevention and therapy: truth or dare? *Toxins (Basel)*. 2010 Apr;2(4):517-51. doi: 10.3390/toxins2040517. Epub 2010 Mar 31.
PMID: 22069598

Russo M, Mupo A, **Spagnuolo C**, Russo GL.

Exploring death receptor pathways as selective targets in cancer therapy.

Biochem Pharmacol. 2010 Sep 1;80(5):674-82. doi: 10.1016/j.bcp.2010.03.011. Epub 2010 Mar 17. Review.
PMID: 20302848