Short CV

Nationality: Italian, born January 13th, 1961; Massa Lubrense, Napoli, Italy

Current position

-Senior Research Scientist (primo ricercatore) at ISA, Institute of Food Sciences, National Research Council (CNR), Avellino (Italy) since 2001.

-Associated Investigator, Stazione Zoologica "Anton Dohrn", Naples (since 1997).

Education and training

-M. Sc. in Biological Sciences, Univ. Federico II, Naples, Italy (1986).

-Research Doctoral in Biochemical Sciences issued by associated Universities of Naples and Bari, Italy (1993).

Professional Appointments

-1986-90. Post-doctoral Fellow, Department of Biochemistry of Macromolecules, 1st Medical School, University of Naples.

-1989. August-December, Visiting Scientist, Cold Spring Harbor Laboratory, New York (NY, USA).

-1991-93. Post-doctoral Fellow, Cold Spring Harbor Laboratory, New York (NY, USA).

-1994. Staff Fellow, Department of Biochemistry of Macromolecules, 1st Medical School, University of Naples.

-1995-96. Research Scientist (not permanent position), Stazione Zoologica "Anton Dohrn", Naples.

-1997-Dec 01. Research Scientist (permanent position), Institute of Food Sciences, National Research Council, Avellino, Italy

Visiting Scientist

-1995. July. Visiting Scientist, Station Zoologique Villefranche-sur-Mer (Nice, Francia).

-1995. November. Visiting Scientist, Osiris Therapeutics, Inc., Baltimore (MD, USA).

-1995. December. Visiting Scientist, The Institute for Reproductive Medicine and Science of Saint Barnabas, West Orange (NJ, USA).

-1998. November. Visiting Scientist, Osiris Therapeutics, Inc., Baltimore (MD, USA).

-2000. June. Visiting Scientist, Van Andel Institute, Grand Rapids (MI, USA)

-2010. November. Visiting Scientist, Department of Molecular genetics and Microbiology, Stony Brook University, New York (NY, USA)

-2011. June-July. Visiting Scientist, Department of Molecular genetics and Microbiology, Stony Brook University, New York (NY, USA)

-2015. June-July. Visiting Scientist, Department of Molecular genetics and Microbiology, Stony Brook University, New York (NY, USA)

Awards/Honors

-2014 Fulbright Research Scholar (J. William Fulbright Foreign Scholarship Board of Washington DC, USA)

-2014 National Scientific Qualification (art.16 of the law 30 December 2010, n.240) as Full Professor in Biochemistry (this regulation defines a new procedure for the University Professor position recruiting, based on scientific qualification criteria. A national commission evaluates and assesses the candidates scientific qualification)

-Member of the advisory board of the international association Getting To Know Cancer (http://www.gettingtoknowcancer.org), based in Canada (since 2012)

-Member of the International Technology Transfer Network (ITTN; www.ittn.com.cn) based in Beijing (China) (since 2015)

- Member of the Governing Board of the Italian Society of Human Nutrition (since 2015)

Grants awarded (from 2005-present)

EUROPEAN PROJECTS

2007-09. Title: Mapping And Comparing Oils (MAC-Oils, Contract no.: 43083). Specific Support Action, Food Quality and Safety Priority, EU FP6 (Project Coordinator: Dr. Gian Luigi Russo).

2010-2012. Title: "In vitro and in vivo models of arthritic processes for studying the mechanisms of inflammation and oxidative stress link-up. New perspectives for arthritis therapy". Bilater programme between CNR-SAV (Slovak Republic) (co-ordinator).

2013-2015. Title: "Phytochemicals in ameliorating rheumatoid arthritis therapy: from preclinical studies to clinical applications" (Acronym: PhytoArt). Bilater programme between CNR-SAV (Slovak Republic)) (co-ordinator).

2016-17. Title "Evaluation of Quercetin and Green Tea in combination with methotrexate for arthritis therapy" (Acronym: PhytoArt 2.0). Bilater programme between CNR-SAV (Slovak Republic)) (co-ordinator).

NATIONAL PROJECTS

2002-05. Title: "Food flavonoids and their chemopreventive activity against degenerative diseases". From Istituto Superiore di Sanità (Italian governmental institution) (co-investigator).

2008.Title: "Biochip to evaluate food toxicity in humans". Granted by Italian National Research Council (principal investigator).

2010-14. Title: "Development of new pharmacological strategies for the treatment of cognitive dysfunction associated with aging and psychiatric disorders, with special reference to psychosis and neurodegenerative diseases". Granted by Italian Ministry of Education and University (principal investigator).

2008-09. Title: "Monitoring of environmental contaminants in the food chain and health effects". Workpackage within the program "Environment and Health", granted by Italian National Research Council (co-investigator).

2010-11. Title: "The Italian pilot project SANPEI – "Healthy as a Fish*: enhancement of Italian native species from organic aquaculture for school catering". From The Italian Ministry of Agriculture (co-investigator).

2012-15. Title: "New functional foods from regional products possessing healthy properties". C.I.S.I.A. project. (Project Coordinator: Dr. Gian Luigi Russo). National Research Council (principal investigator).

2011-13. Title: "Innovative approaches in the evaluation and prevention of the food exposure to contaminating toxic persistent and emergent, through the study of the diet and the debugging of innovative methods of survey". Istituto Zooprofilattico Sperimentale (Portici, Italy) (participant).

2012-15. Title: "Impact of functional foods and / or nutraceuticals containing polyphenols on energetic and glyco-lipid metabolism, inflammation, gene expression and epigenetic modifications in experimental models and in humans". PRIN project from Italian Ministry of education and University (participant)

REGIONAL PROJECTS

2005-08. Title: "Protective effect of red wine polyphenols against chronic and degenerative pathologies". Project Coordinator: Dr. Gian Luigi Russo. Regione Campania (Local County administration)

2012-15. Title: "Quality of local products from Campania region and its terroir: innovative and integrated approaches to strengthen the competitiveness of agribusiness". Regione Campania (Local County administration) (co-investigator)

2013-2015. Title: Scientific Responsible project "Wellbeing and biotechnology: New Nutraceutical and Cosmeceutical Products and Processes to improve Human Health" (Benten). Regione Campania (Local County administration) (principal investigator).

S.M.E. PROJECTS
2004-06. Title: “Innovative tests to abolish in vivo methods to evaluate human toxicological risk caused by chemical compounds used in several commercial fields”. From Chelab s.r.l. (Italian private biotechnology firm) (co-investigator).
2009-11. Title: “Biological activity of phytochemicals in beers”. From DRIVE Beer (Baragiano (PZ) Italy) (principal investigator).

Editorial/Peer reviewing activity
-Associate Editor of *Nutrition, Metabolism and Cardiovascular Diseases* (Elsevier – ISSN 0939-4753).
- Included in the **Editorial Advisory Board** of the following journals:
World Journal of Clinical Oncology (Baishideng Publishing Group Inc – ISSN 2218-4333)
Heliyon (Elsevier – ISSN 2405-8440)
Journal of Natural Products in Cancer Prevention and Therapy (JNPCPT; United Scientific Group - ISSN to be assigned)
-Peer reviewer for many international journals
-Expert evaluator in the program Quality of Life and Management of Living Resources – Key Action 6.2. Expert evaluator for the Mid Term Review in the program Quality of Life and Management of Living Resources (2000-2002)
-Expert evaluator in Horizon2020, Marie Skodowska-Curie Actions; Individual fellowships (2014)
-Vice-chair in Horizon2020, Marie Skodowska-Curie Actions; Individual fellowships (2015)

Teaching and educational activity
-1993-94. Professor of Genetics, II University of Naples, Naples, Italy.
-1994-95. Professor of Biochemistry of Nucleic Acids, II University of Naples, Naples, Italy.
-1995-96. Professor of Biochemistry of Nucleic Acids, II University of Naples, Naples, Italy.
-1999-2000. Professor of Biochemistry of Marine Organisms, University of Naples “Federico II”, Naples, Italy.
-2000-2001. Professor of Biochemistry of Marine Organisms, University of Naples “Federico II”, Naples, Italy.
-2001-2002. Professor of Biochemistry of Marine Organisms, University of Naples “Federico II”, Naples, Italy.
-2003-2004. Professor of Applied Biotechnology, University of Naples “Federico II”, Naples, Italy.
-2004-2005. Professor of Applied Biotechnology, University of Naples “Federico II”, Naples, Italy.
-2005-2006. Professor of Applied Biotechnology, University of Naples “Federico II”, Naples, Italy.
-Teaching activity in CME and master courses in the field of cancer biology, chemoprevention, nutrition.

Publications (last five years)
The results of my research activity are documented by more than 100 original articles on peer-reviewed journals (H-index 2016=33 [according to Google Scholar]) with a total impact factor > 360 (Web of Sciences).

C. Spagnuolo, G. Flores, **G.L. Russo**, M.L. Ruiz del Castillo. A phenolic extract obtained from methyl jasmonate treated strawberries enhances apoptosis in a human cervical cancer cell line. (2016) *in press*
E. Caiazzo, I. Tedesco, C. Spagnuolo, **G.L. Russo**, A. Ialenti and C. Cicala. Red Wine Inhibits Aggregation and Increases ATP-diphosphohydrolase (CD39) Activity of Rat Platelets in Vitro. Nat. Prod. Commun. (2016) *in press*

S.F. Nabavi, A.J. Barber, C. Spagnuolo, **G.L. Russo**, M. Daglia, S.M. Nabavi & E. Sobarzo-Sánchez. Nrf2 as molecular target for polyphenols: A novel therapeutic strategy in diabetic retinopathy. Critical Reviews in Clinical Laboratory Sciences. 53: 293-312 (2016)

Klionsky DJ, Abdelmohsen K, Abe A, Abedin MJ, Abeliovich H, Acevedo Arozena A, Adachi H,…. **Russo GL**…. Zhuang SM, Zhuang X, Ziparo E, Zois CE, Zoladek T, Zong WX, Zorzano A, Zughaier SM. Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). Autophagy. 12:1-222 (2016)

Tedesco I, Moccia S, Volpe S, Alfieri G, Strollo D, Bilotto S, Spagnuolo C, Di Renzo M, Aquino RP, **Russo GL**. Red Wine Activates Plasma Membrane Redox System in Human Erythrocytes. Free Radic Res. 50: 557-569 (2016)

C. Spagnuolo, M. Napolitano, I. Tedesco, S. Moccia, A. Milito, **G.L. Russo**. Neuroprotective role of natural polyphenols. Current Topics in Medicinal Chemistry, 16:1943-1950 (2016)

GL Russo, V Vastolo, M Ciccarelli, L Albano, PE Macchia, P Ungaro. Dietary Polyphenols and Chromatin Remodelling. Critical Reviews in Food Science and Nutrition, DOI:10.1080/10408398.2015.1062353 *[Epub ahead of print]*

M Durante, MS Lenucci, PP Marrese, M De Caroli, G Piro, GL Russo, G Mita. α-Cyclodextrin nanoencapsulation of supercritical CO2 extracted oleoresins from different plant matrices: a stability study. Food Chemistry. 199:684-693 (2016)

M Ciccarelli, V Vastolo, L Albano, M Lecce, S Cabaro, A Liotti, M Longo, GL Russo, PE Macchia, P Formisano, F Beguinot, P Ungaro. Glucose-induced expression of the homeotic transcription factor Prep1 is associated with histone post-translational modifications in skeletal muscle. Diabetologia, 59:176-86 (2016)

Masullo M, Cantone V, Cerulli A, Lauro G, Messano F, **Russo GL**, Pizza C, Bifulco G, Piacente S. Giffonins J-P, Highly Hydroxylated Cyclized Diarylheptanoids from the Leaves of Corylus avellana Cultivar "Tonda di Giffoni". J Nat Prod. 78, 2975-82 (2015)

K. Block, C. Gyllenhaal1, L. Lowe, …. **G.L. Russo**, …. (187 authors). A Broad-Spectrum Integrative Design for Cancer Prevention and Therapy. Seminars in Cancer Biology, 35, S276–S304 (2015)

M Russo, **GL Russo**, M Daglia, PD Kasi, S Ravi, SF Nabavi, SM Nabavi. Understanding genistein in cancer: The "good" and the "bad" effects: A review. Food Chemistry 196, 589-600 (2015)

C Gardi, K Bauerova, B Stringa, V Kuncirova, L Slovak, S Ponist, F Drafi, L Bezakova, I Tedesco, A Acquaviva, S Bilotto, **GL Russo**. Quercetin reduced inflammation and increased antioxidant defense in rat adjuvant arthritis. Archives of biochemistry and biophysics 583, 150-157 (2015)

S.F. Nabavi, S. Bilotto, **G.L. Russo**, I. Erdogan Orhan, S. Habtemariam, M. Daglia, K.P. Devi, M.R. Loizzo, R. Tundis and S.M. Nabavi. Omega-3 polyunsaturated fatty acids and cancer: lessons learned from clinical trials. Cancer and Metastasis Reviews, 34 (3), 359-380 (2015)

Nabavi SF, **Russo GL**, Daglia D, Nabavi SM. Role of quercetin as an alternative for obesity treatment: you are what you eat! Food Chemistry 179C:305-310 (2015)

C Spagnuolo, **GL Russo**, IE Orhan, S Habtemariam, M Daglia, A Sureda, SF Nabavi, PD Kasi, MR Loizzo, R Tundis, SM Nabavi. Genistein and Cancer: Current Status, Challenges, and Future Directions. Advances in Nutrition 6, 408-419 (2015)

I. Tedesco, V. Carbone, C. Spagnuolo, P. Minasi, **G.L. Russo**. Identification and quantification of flavonoids from two Southern Italy cultivars of Allium cepa L. Var. Tropea (red onion) and Montoro (copper onion) and their capacity to protect human erythrocytes from oxidative stress. J. Agricul. Food Chem. 63:5229-38 (2015)

Devi KP, Rajavel T, **Russo GL**, Daglia M, Nabavi SF, Nabavi SM. Molecular Targets of Omega-3 Fatty Acids for Cancer Therapy. Anticancer Agents Med Chem. 15: 888-95 (2015)

R.M. Mohammad, L. Lowe, C. Yedjou, H.-Y. Hsu, L.-T. Lin, M.D. Siegelin, C. Fimognari, N. B. Kumar, Q. Ping Dou, H. Yang, A.K. Samadi, **G.L. Russo**, C. Spagnuolo, S.K. Ray, M. Chakrabarty, J.D. Morre, H.M. Coley, K. Honoki, H. Fujii, A.G. Georgakilas, A. Amedei, E. Niccolai, A. Amin, S.S. Ashraf, W.G. Helferich, X. Yang, C.S. Boosani, G. Guha, D. Bhakta, M.R. Ciriolo, K. Aquilano, S. Chen, S.I. Mohammed, W.N. Keith, A. Bilsland, D. Halicka, S. Nowsheen and A.S. Azmi. Overcoming Resistance to Apoptosis. Seminars in Cancer Biology, 35, S78–S103 (2015)

S. Bilotto, R. Boni, **G.L. Russo**, M.B. Lioi. Meiosis progression and donor age affect expression profile of DNA repair genes in bovine oocytes. Zygote 14:1-8 (2015)

G.L. Russo, M. Russo, C. Spagnuolo. The pleiotropic flavonoid quercetin: from its metabolism to the inhibition of protein kinases in chronic lymphocytic leukemia. Food & Funct. 5:2393-401 (2014)

T.N. Newman, E. Liverani, E. Ivanova., **G.L. Russo**, N. Carpino, D. Ganea, F. Safadi, S.P. Kunapuli and A.Y. Tsygankov. Members of the novel UBASH3/STS/TULA family of cellular regulators suppress T-cell-driven inflammatory responses *in vivo*. Immunology and Cell Biology 1–14; (2014)

M. Russo, C. Spagnuolo, S. Bilotto, I. Tedesco, G. Maiani, **G. L. Russo**. Inhibition of protein kinase CK2 by quercetin enhances CD95-mediated apoptosis in a human thymus-derived T cell line. Food Res Int. 63: 244–251 (2014)

G. L. Russo, M. Russo, I. Castellano, A. Napolitano, A. Palumbo. Ovothiol Isolated from Sea Urchin Oocytes Induces Autophagy in the Hep-G2 Cell Line. Marine Drugs 47:132-6 (2014)

Russo G. L., Russo M, Spagnuolo C, Tedesco I, Bilotto S, Iannitti R, Palumbo R. Quercetin: a pleiotropic kinase inhibitor against cancer. Cancer Treat Res. 159:185-205 (2014)

A. Carraturo, K. Raieta, I. Tedesco, J. Kim, and **G.L. Russo.** Antibacterial activity of phenolic compounds derived from *Ginkgo biloba* sarcotestas against food-borne pathogens. British Microbiology Research J. 2014, 4:18-27 (2014)

C. Spagnuolo, I. Tedesco, M.G. Volpe, S. Bilotto, M. Russo, **G.L. Russo.** Cytotoxic Properties of Lyophilized Beers in a Malignant Cell Line. Food and Nutrition Sciences 2014**,** 5:45-51 (2014)

G. Romano, E. Manzo, **G.L. Russo**, G. d'Ippolito, A. Cutignano, M. Russo, A. Fontana. Design and Synthesis of Pro-Apoptotic Compounds Inspired by Diatom Oxylipins. Marine Drugs 11:4527-4543 (2013)

I Tedesco, M Russo, S Bilotto, C Spagnuolo, A Scognamiglio, R Palumbo, A Nappo, G Iacomino, L Moio, **G.L. Russo**. Dealcoholated red wine induces autophagic and apoptotic cell death in an osteosarcoma cell line. Food and Chemical Toxicology 60: 377-384 (2013)

G.L. Russo, M. Russo, P. Ungaro. AMP-activated Protein Kinase: a target for old drugs against diabetes and cancer. Biochem. Pharmacol. 86:339-50 (2013)

M. Russo; C. Spagnuolo; S. Volpe, I. Tedesco; S. Bilotto, **G.L. Russo**. 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. 85:927-36 (2013)

S. Bilotto, C. Spagnuolo, M. Russo, I. Tedesco, B. Laratta and **G.L. Russo**. Dietary Phytochemicals in Chemoprevention of Cancer: an Update. Immun., Endoc. & Metab. Agents in Med. Chem. 13: 2-24 (2013)

A. Gallo; G.L. Russo, E. Tosti. T-type Ca2+ current activity during oocyte growth and maturation in the ascidian *Styela plicata*. PLOS ONE 8: e54604 (2013)

I. Tedesco; C. Spagnuolo; M. Russo; R. Iannitti; A. Nappo; **G.L. Russo**. Protective effect of γ-irradiation against hypochlorous acidinduced haemolysis in human erythrocytes. Dose-Response 11:401-12 (2013)

C. Spagnuolo, M. Russo, S. Bilotto, I. Tedesco, B. Laratta and **G.L. Russo**. Dietary polyphenols in cancer prevention: the example of the flavonoid quercetin in leukemia. Ann. N.Y. Acad. Sci. 1259: 95-103 (2012)

L. Pisapia, G. Del Pozzo, P. Barba, L. Caputo, L. Mita, E. Viaggiano, **G.L. Russo**, C. Nicolucci, S. Rossi, U. Bencivenga, D.G. Mita, N. Diano. Effects of some endocrine disruptors on cell cycle progression and murine dendritic cell differentiation. Gen Comp Endocrinol 178: 54–63 (2012)

G.L. Russo, and E. Picano. The effects of radiation exposure on interventional cardiologists. Eur. Heart J. 33: 423-4 (2012).

G.L. Russo, I. tedesco, M. Russo, A. Cioppa, M.G. Andreasi, and E. Picano. Cellular Adaptive Response to Chronic Radiation Exposure in Interventional Cardiologists. Eur. Heart J. 33: 408-14 (2012).

M. Russo, C. Spagnuolo, I. Tedesco, S. Bilotto and and **G.L. Russo**. Flavonoid quercetin in disease prevention and therapy: facts and fancies. Biochem Pharmacol. 83: 6-15 (2012).