

CURRICULUM VITAE

FORMATO EUROPEO/EUROPEAN FORMAT

INFORMAZIONI PERSONALI/ PERSONAL INFORMATION



Nome, Cognome/Name, Surname Rosanna Palumbo

Indirizzo/Address
Via, numero civico, c.a.p., città,
nazione/ House number, street
name, postcode, city, country

Telefono/Telephone +39 3290082317

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E-mail rosanna.palumbo@cnr.it

Sito web/Website

Nazionalità/Nationality italian

Luogo e data di nascita/ Place and
Date of birth

Codice fiscale/Social security number

ESPERIENZA PROFESSIONALE /WORK EXPERIENCE

Se dipendente CNR indicare: N. MATRICOLA: 700
QUALIFICA: RICERCATORE
LIVELLO: III LIVELLO

In ordine di data /Dates (from – to)

[Iniziare con le più recenti ed
elencare separatamente ciascun
incarico ricoperto/ Add separate
entries for each relevant post
occupied, starting with the most
recent.]

2003-present Research scientist, Institute of Biostructure and Bioimages (IBB), National
Research Council (CNR) Naples Italy.

1994 -2003 research scientist, Institute of Food Science (ISA) CNR

1992-1993 CNR fellowship, department of Biochemistry of Macromolecules 1st Medical School,
University "Federico II", Naples, Italy

1989 June-November, Visiting Scientist, Cold Spring Harbor Laboratory, New York, (N.Y., USA)

1989-91 Italian Association for Cancer Research (AIRC) junior research fellowship, department
of Biochemistry of Macromolecules 1st Medical School, University "Federico II", Naples

1985-88 post degree stage, University "Federico II", Naples, Italy

Nome e indirizzo del datore di lavoro / Name and address of employer Institute of Biostructure and Bioimages
Via T. De Amicis, 95 80145 Napoli, Italy

Tipo o settore di attività / Type of
business or sector Public research organization

Funzione o posto occupato /
Occupation or position held Research Scientist

Principali mansioni e responsabilità /
Main activities and responsibilities

2005-2013 - Responsible of cell biology lab of Napoli centro operative unit

ISTRUZIONE E FORMAZIONE / EDUCATION AND TRAINING

In ordine di data /Dates (from – to)

1996 Advanced course of Immunocytochemistry Department of Human Anatomy Medical School, University "Federico II", Naples, Italy

[Iniziare con le più recenti ed elencare separatamente ciascun corso frequentato con successo/ Add separate entries for each relevant course you have completed, starting with the most recent.

1994 EMBO course - Growth and differentiation of Epithelial cells - National Institute for Cancer Research (IST), Genova, Italy

1991 (4-year) Specialization degree in Microbiology and Virology, Medical School, II University of Naples, Italy

1986 Approval to the profession of Biology, University Federico II, Naples

1985 Degree in Biological Science, Summa cum laude, University Federico II, Naples, Italy

Certificato o diploma ottenuto /Title of qualification awarded

2018-2024 Qualified for the position of Professor in Biology by the Italian Ministry of Education and Research (MIUR)

Biochemistry, cell biology

Livello nella classificazione nazionale o internazionale / Level in National classification

ATTIVITA' DI RICERCA / RESEARCH ACTIVITIES

Attuali campi di ricerca / Research sectors

- 1) Study of the chemoprevention mechanisms of polyphenols present in the diet.
- 2) Interaction between new antitumor agents and human cell lines

Recenti attività scientifiche/ Recent Scientific Activities

Main research projects:

1. Studies on the biological effect of new synthetic aminoacid
2. Studies on the effect of new liposomal aggregates on human cancer cells
3. Analysis of the efficacy of the designed molecules (peptides and/or peptidomimetics) in modulating EphA2 receptor endocytosis and degradation in cancer cells
4. Studies on the molecular mechanisms induced by acylpeptide hydrolase APEH/proteasome system in cancer cells

Pubblicazioni/ Books and Articles

2022 - M. Vincenzi, F. A. Mercurio, C. Di Natale, R. Palumbo, L. Pirone, S. La Manna, D. Marasco, E. M. Pedone, M. Leone

Targeting Ship2-Sam with peptide ligands: Novel insights from a multidisciplinary approach Bioorganic Chemistry doi: 10.1016/j.bioorg.2022.105680

2022 - Scognamiglio PL, Vicidomini C., Fontanella F., De Stefano C, Palumbo R., Roviello G. N. Protein binding of benzofuran derivatives: a CD spectroscopic and in silico comparative study of the effects of 4-nitrophenyl functionalized benzofurans and benzodifurans on BSA protein structure

Biomolecules, doi: 10.3390/biom12020262

2022 - Conte, M.; Palumbo, R.; Monti, A.; Fontana, E.; Nebbioso, A.; Ruvo, M.; Altucci, L.; Doti, N.
 Relevance of AIF/CypA Lethal Pathway in SH-SY5Y Cells Treated with Staurosporine.
Int. J. Mol. Sci. 2022, 23, 265. doi:10.3390/ijms23010265

2021 - O. Zeni, S. Romeo, A. Sannino, R. Palumbo, M.R. Scarfi
 Evidence of bystander effect induced by radiofrequency radiation in a human neuroblastoma cell line
Environmental research 196 doi: 10.1016/j.envres.2021.110935

2021 - Ngoc B. VU, Hoa T. NGUYEN, Rosanna PALUMBO, Rinaldo PELLICANO, Sharmila FAGOONEE, Phuc V. PHAM
 Stem cell-derived exosomes for wound healing: current status and promising directions
MINERVA MEDICA doi: 10.23736/S0026-4806.20.07205-5

2020 - Fik-Jaskółka Marta A., Mkrtychyan Anna F., Saghyan Ashot S., Palumbo Rosanna, Belter Agnieszka, Hayriyan Liana A., Simonyan Hayarpi, Roviello Valentina., Roviello Giovanni N.
 Biological macromolecule binding and anticancer activity of synthetic alkyne-containing L-phenylalanine derivatives.
AMINO ACIDS, vol 52 (5) pag 755-769 doi: 10.1007/s00726-020-02849-w

2020 - Fik-Jaskółka Marta A., Mkrtychyan Anna F., Saghyan Ashot S., Palumbo Rosanna, Belter Agnieszka, Hayriyan Liana A., Simonyan Hayarpi, Roviello Valentina., Roviello Giovanni N.
 Spectroscopic and SEM evidences for G4-DNA binding by a synthetic alkyne-containing amino acid with anticancer activity
Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy
<https://doi.org/10.1016/j.saa.2019.117884>

2019 – Carella A, Roviello V, Iannitti R, Palumbo R, La Manna S, Marasco D, Trifuoggi M, Diana R, Roviello GN. Evaluating the biological properties of synthetic 4-nitrophenyl functionalized benzofuran derivatives with telomeric DNA binding and antiproliferative activities. *Int J Biol Macromol.* 121:77-88. doi 10.1016/j.ijbiomac.2018.09.153

2019 - Angela D'Amora, Maria Elena Cucciolito, Roberta Iannitti, Giancarlo Morelli, Rosanna Palumbo, Francesco Ruffo, Diego Tesaro, Pyridine Ruthenium(III) complexes entrapped in liposomes with enhanced cytotoxic properties in PC-3 prostate cancer cells. *Journal of Drug Delivery Science and Technology* 51 : 552-558. doi: 10.1016/j.jddst.2019.02.009

2017 - Roviello GN, Iannitti R, Palumbo R, Simonyan H, Vicedomini C, Roviello V. Lac-TTA, a novel lactose based amino acid-sugar conjugate for anti-metastatic applications. *Amino Acids*. May 6. doi: 10.1007/s00726-017-2433-2

2017 – Roviello GN, Iannitti R, Palumbo R, Simonyan H, Vicedomini C. Synthesis and biological evaluation of a novel Amadori compound. *Amino Acids*. Feb;49(2):327-335. doi: 10.1007/s00726-016-2363-4. Epub 2016 Nov 18.

2016 – Palumbo R, Gogliettino M, Cocca E, Iannitti R, Sandomenico A, Ruvo M, Balestrieri M, Rossi M, Palmieri G. APEH inhibition affects osteosarcoma cell viability via downregulation of the proteasome. *Int J. Mol Sci* 17(10): Int J Mol Sci. Sep 23;17(10). pii: E1614. doi: 10.3390/ijms17101614

2015 - Ringhieri P, Diaferia C, Galdiero S, Palumbo R, Morelli G, Accardo A. Liposomal doxorubicin doubly functionalized with CCK8 and R8 peptide sequences for selective intracellular drug delivery. *J Pept Sci.* 21(5):415-25. doi: 10.1002/psc.2759.

2015 - Focà A, Sanguigno L, Focà G, Strizzi L, Iannitti R, Palumbo R, Hendrix MJ, Leonardi A1, Ruvo M, Sandomenico A. New Anti-Nodal Monoclonal Antibodies Targeting the Nodal Pre-Helix Loop Involved in Cripto-1 Binding. *Int J Mol Sci.* 7;16(9):21342-62. doi: 10.3390/ijms160921342.

2014 - P. Ringhieri, R. Iannitti, C. Nardon, R. Palumbo, D. Fregona, G. Morelli, A. Accardo. Target selective micelles for bombesin receptors incorporating Au(III)-dithiocarbamate complexes. *International Journal of Pharmaceutics* 473:194-202
 doi:10.1016/j.ijpharm.2014.07.014

2014 - Accardo A, Ringhieri P, Palumbo R, Morelli G. Influence of PEG length on conformational and binding properties of CCK peptides exposed by supramolecular aggregates. *Biopolymers*
 doi: 10.1002/bip.22500

2014 - Russo GL, Russo M, Spagnuolo C, Tedesco I, Bilotto S, Iannitti R, Palumbo R. Quercetin: A Pleiotropic Kinase Inhibitor Against Cancer. *Advances in Nutrition and Cancer*, 159:185-205

2013 - Bergamo P, Cocca E, Palumbo R, Gogliettino M, Rossi M, Palmieri G. RedOx Status, Proteasome and APEH: Insights into Anticancer Mechanisms of t10, c12-Conjugated Linoleic Acid Isomer on A375 Melanoma Cells.
PlosOne 19;8(11):e80900. doi:10.1371/journal.pone.0080900

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
[http://dx.doi: 10.1016/j.fct.2013.07.078](http://dx.doi.org/10.1016/j.fct.2013.07.078)

2012 - Ziaco B, Diana D, Capasso D, Palumbo R, Celentano V, Di Stasi R, Fattorusso R, D'Andrea LD. C-terminal truncation of Vascular Endothelial Growth Factor mimetic helical peptide preserves structural and receptor binding properties. *Biochem Biophys Res Commun.* 424(2):290-4

2011 - Sandomenico A, Monti SM, Palumbo R, Ruvo M. A new FcεRI receptor-mimetic peptide (PepE) that blocks IgE binding to its high affinity receptor and prevents mediator release from RBL 2H3 cells. *J Pept Sci* 17(9):604-9. doi: 10.1002/psc.1368

2011 - A Accardo, A. Morisco, P. Palladino, R. Palumbo, D. Tesauro and G. Morelli. Amphiphilic CCK peptides assembled in supramolecular aggregates: structural investigations and in vitro studies. *Mol. Biosyst* 7(3):862-70

2011 - A. Morisco, A. Accardo, D. Tesauro, R. Palumbo, E. Benedetti, G. Morelli. Peptide labeled supramolecular aggregates as selective doxorubicin carriers for delivery to tumor cells. *Biopolymers* 96(1):88-96 doi: 10.1002/bip.21491

2010 - A.Sandomenico, S. Monti, R. Palumbo, M. Ruvo. A novel and highly selective IgE binding peptide with anti-allergic properties. *J Pept Sci* 16(1):1042010

2010 R. Di Stasi, D. Diana, D. Capasso, R. Palumbo, A. Romanelli, C. Pedone, R. Fattorusso, L. D. D'Andrea. VEGFR1D2 in drug discovery: Expression and molecular characterization. *Biopolymers* 94(6):800-809

2009 - Cigliano L., Pugliese C. R.; Spagnuolo M. S., Palumbo R., Abrescia P. Haptoglobin binds the anti-atherogenic protein Apolipoprotein E: impairment of the apolipoprotein E stimulation on both the enzyme lecithin-cholesterol acyl-transferase activity and the cholesterol uptake by hepatocytes *FEBS J.* 276(21):6158-71

2009 - Sandomenico A., Monti S.M., Marasco D., Dathan N., Palumbo R, Saviano M., Ruvo M. IgE-binding properties and selectivity of peptide mimics of the FcγεRI binding site. *Mol Immunol.* 46(16):3300-9.

2008 - R. Palumbo, F. Brescia, D. Capasso, A. Sannino, M. Sarti M. Capri, E. Grassillie and M. R. Scarfi. Exposure to 900 MHz radiofrequency radiation induces Caspase 3 activation in proliferating human lymphocytes. *Radiation Research* 170, 327–334

2008 - O. Zeni, R. Palumbo, R. Bernini, L. Zeni, M. Sarti, M.R. Scarfi. Cytotoxicity investigation on cultured human blood cells treated with single-wall carbon nanotubes. *Sensors* 8: 488-499.

2007 - V. Costantino, C. de Rosa, E. Fattorusso, C. Imperatore, A. Mangoni, C. Irace, C. Maffettone, D. Capasso, L. Malorni, R. Palumbo, C. Pedone. Oreocerebrosides, new bioactive cerebrosides with a triunsaturated sphingoid base from the sea star *Oreaster Reticulatus*. *Eur J Org Chem* 31: 5277-5283

2006 - R. Bernini E. De Nuccio, F. Brescia, A. Minardo, L. Zeni, P. M. Sarro, R. Palumbo, M.R. Scarfi. Development and characterization of an integrated silicon micro flow cytometer. *Anal. Bioanal. Chem.*386 (5): 1267-72

2006 - R. Palumbo, D. Capasso, F. Brescia, P. Mita, M. Sarti, F. Bersani, M.R. Scarfi. Effects on apoptosis and reactive oxygen species formation on Jurkat cells exposed to 50 Hz electromagnetic fields. *Bioelectromagnetics* 27 (2): 159-62.

2006 - D. Musumeci, M. Valente, D. Capasso, R. Palumbo, M. Gorlac, M. Schmidtke, R. Zell E, G. N. Roviello, R. Sapio, C. Pedone, E. M. Bucci. A short PNA targeting Coxsackievirus B3 5'-nontranslated region prevents virus-induced cytolysis. *JOURNAL OF PEPTIDE SCIENCE*, vol. 12, p. 161-170. doi: 10.1002/psc.708

2005 - I. Tedesco, A. Nappo, F. Petitto, G. Iacomino, F. Nazzaro, R. Palumbo, G. L. Russo. Antioxidant and cytotoxic properties of beer polyphenols on HL60 cell line. *Nutrition and Cancer*, vol. 52, p. 74-83, ISSN: 0163-5581, doi: 10.1207/s15327914nc5201_10

2005- M. Russo, I. Tedesco, G. Iacomino, R. Palumbo, G. Galano, G.L. Russo. Dietary phytochemicals in chemoprevention of cancer *Current Medicinal Chemistry: Immunology, Endocrine and Metabolic Agents.* 5 (1) p. 61-72. doi: 10.2174/1568013053005454

2004 - A. Caridi, A. Cufari, R. Lovino, R. Palumbo, I. Tedesco. Influence of yeast on polyphenol composition of wine. *Food Technology and Biotechnology*, vol. 42, p. 37-40, ISSN: 1330-9862

2003 - Russo M, Palumbo R, Mupo A, Tosto M, Iacomino G, Scognamiglio A, Tedesco I, Galano G. and Russo G.L. Flavonoid quercetin sensitizes a CD95-resistant cell line to apoptosis by activating protein kinase Ca. *ONCOGENE*, vol. 22, p. 3330-3342, ISSN: 0950-9232, doi: 10.1038/sj.onc.1206493

2001 - I. Tedesco, G. L. Russo, F. Nazzaro, M. Russo, Palumbo R (2001). Antioxidant effect of red wine anthocyanins in normal and catalase-inactive human erythrocytes. *Journal of Nutritional Biochemistry*, vol. 12, p. 505-511, doi: 10.1016/S0955-2863(01)00164-4

2000 - I. Tedesco, M. Russo, P. Russo, G. Iacomino, G.L. Russo, A. Carraturo, C. Faruolo, L. Moio, Palumbo R. Antioxidant effect of red wine polyphenols on red blood cells. *Journal of*

Nutritional biochemistry, , vol. 11, p. 114-119, ISSN: 0955-2863, doi: 10.1016/S0955-2863(99)00080-7

2000 - G. L. Russo, V. Della Pietra, C. Mercurio, Palumbo R, G. Iacomino, M. Russo, M. Tosto, V. Zappia (1999). Protective effects of butyric acid in colon cancer .Advances in Experimental Medicine and Biology, vol. 472, p. 131-147, ISSN: 0065-2598

ULTERIORI INFORMAZIONI / ADDITIONAL INFORMATION

Teaching and educational activity

2011 Professor of Cell Culture, advanced course for Technician in the field of biotechnology and diagnostic pharmaceutical, Regione Campania (local County administration) and MIUR (Italian University and Research Ministry)

2005 Professor of Cell Biology, advanced training course for professional figures in the field of biostructures and bioimaging (STRUIM), Regione Campania (local County administration) PON 2000-06

1995-96 Professor of Cell Culture techniques, degree in Technicians for biomedical laboratory, Medical School, II University of Naples, Italy.

1994-95 teacher course Biochemistry degree in Assistant of Ophthalmology, Medical School, II University of Naples, Italy.

Since 1992 she has assisted in the preparation of the thesis many students in biology and chemistry

Grants:

2014-2016 Structure-based design of anti-cancer therapeutics targeting the Sam domain of Ephrin A2 receptor from AIRC MFAG15831 research staff component

2011-2014 Development of new molecules as potential tools for the diagnosis and therapy of thyroid tumors from CNR and MIUR (Italian University and Research Ministry) research staff component

2008-2010 Copper and angiogenesis: study of the mechanisms of cellular regulation and development of novel modulators of angiogenesis from MIUR (Italian University and Research Ministry) research staff component

2006-2010 Development of a technology platform for the evaluation of the effectiveness of anti-inflammatory drugs, and antineoplastic using cell models and animals from MIUR (Italian University and Research Ministry) research staff component

2004-2009 New compounds for the treatment of type II diabetes from MIUR (Italian University and Research Ministry) research staff component

2003 Use of electromagnetic field for the control of cell viability in cells treated with nanometal crystals from Regione Campania (local County administration) research staff component

2002 Risks and benefits of dietary antioxidants in the prevention of chronic and degenerative pathologies from Ministero della Salute (Italian Health Ministry) research staff component

2000-2001 Miglioramento e valorizzazione dei vini ottenuti da uve autoctone dell'Italia meridionale attraverso lo studio ed il controllo delle variabili critiche che ne determinano la tipicità sensoriali POM B35 from Ministero delle politiche agricole e forestali (Italian Agriculture Ministry) scientific coordinator ISA unit

1999 Dietary Exposure to Vegetal Estrogen and Related Compounds and Effect on Skeletal Tissue (VENUS) Concerted Action (FAIR PL 4456) EU

scientific coordinator of ISA unit.

TRATTAMENTO DEI DATI PERSONALI, INFORMATIVA E CONSENSO

I D.Lgs 30/06/2003, n. 196 "Codice in materia di protezione dei dati personali" regola il trattamento dei dati personali, con particolare riferimento alla riservatezza, all'identità personale e al diritto di protezione dei dati personali; l'interessato deve essere previamente informato del trattamento.

La norma in considerazione intende come "trattamento" qualunque operazione o complesso di operazioni concernenti la raccolta, la registrazione, l'organizzazione, la conservazione, la consultazione, l'elaborazione, a modifica, la selezione, l'estrazione, il raffronto, l'utilizzo, l'interconnessione, il blocco, la comunicazione, la diffusione, la cancellazione e la distruzione di dati, anche se non registrati in una banca dati.

In relazione a quanto riportato, autorizzo il CNR al trattamento dei dati contenuti nel presente *curriculum vitae* e nella documentazione della quale fa parte integrante, sollevandolo da ogni responsabilità e autorizzandolo alla pubblicazione, sul sito web del CNR, della relazione inerente alle proprie ricerche svolte nell'ambito del Progetto finanziato dal CNR. Inoltre acconsento all'aggiornamento delle informazioni intranet che mi

riguardano sia relative le pubblicazioni sia alle ricerche svolte.

The Undersigned hereby authorises the CNR to utilize and store the personal sensitive data contained in the attached Curriculum Vitae for the purposes of bilateral Joint research projects and within the framework of the Data protection Act No. 196, dates 30 June 2003 as promulgated by the Italian Government.

(barrare la casella)

Si, acconsento