

**FORMATO EUROPEO
PER IL CURRICULUM
VITAE**



INFORMAZIONI PERSONALI

Nome Leonetti Carlo
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Nazionalità [REDACTED]

Data di nascita [REDACTED]

Titolo di Studio

Altri titoli di studio e professionali

1981- Laurea in Scienze Biologiche, Università di Roma "La Sapienza"

1986- Abilitazione alla professione di Biologo

QUALIFICA ATTUALE
AMMINISTRAZIONE

Dirigente Biologo
UOSD SAFU, IRCCS- Istituto Nazionale Tumori Regina Elena, Roma

CAPACITÀ LINGUISTICHE

Buona conoscenza della lingua inglese parlata e scritta

**CAPACITÀ NELL'USO DI
TECNOLOGIE**

Colture cellulari (linee primarie e stabilizzate). Test di chemiosensibilità e analisi statistica di sinergismo, additività e antagonismo farmacologico. Tecniche di biologia molecolare e biochimica. Spettrofotometria. Elettroforesi. Infezioni transienti e stabili di cellule in coltura per l'espressione di proteine ricombinanti. Citofluorimetria. Impianti eterotopici ed ortotopici di tumori umani in topi immunodepressi. Sviluppo di tumori luminescenti. Tecniche di imaging. Sperimentazioni farmacologiche in animali con analisi di efficacia e indagini tossicologiche.

INCARICHI RICOPERTI

- 1999-2006: Consigliere e Segretario dell' Associazione Italiana Colture Cellulari (ONLUS-AICC).
- 2007-2010: Vicepresidente dell' Associazione Italiana Colture Cellulari (ONLUS-AICC).
- 2011-2014: Presidente dell' Associazione Italiana Colture Cellulari (ONLUS-AICC).
- 2015-2018: Past Presidente dell' Associazione Italiana Colture Cellulari (ONLUS-AICC).
- 2000-2001 e 2001-2002: Professore a contratto Scuola di Specializzazione in Oncologia, II Facoltà di Medicina e Chirurgia, Università degli Studi di Roma "La Sapienza".
- 2016-Oggi: Membro scientifico Organismo Preposto per il Benessere Animale (OPBA).

RICERCA FINALIZZATA

-Responsabile Unità Operativa Progetto C.N.R. Italia/Usa 1994 " Uso di oligonucleoidi antisenso al c-myb per lo studio e la terapia del melanoma". Coordinatore Dr. Bruno Calabretta
- Responsabile Unità Operativa Progetto Ministero della Salute 2001-2003 "Identificazione di molecole coinvolte nello stress ossidativo quali bersagli per la terapia antitumorale ". Coordinatore Dr Gabriella Zupi.
- Responsabile Unità Operativa Progetto Ministero della Salute 2001-2003 "Meccanismi di resistenza e terapie innovative del melanoma umano". Coordinatore Dr Giuseppe Arancia.
- Responsabile Unità Operativa Progetto Ministero della Salute 2003-2005 "Sviluppo di nuove strategie antitumorali: identificazione dei target subcellulari mediante l'applicazione di metodologie avanzate. Coordinatore Dr Giuseppe Arancia.
- Responsabile Unità Operativa Progetto Triennale Ministero della Salute 2004-2006 "Nuove strategie integrate per l'ottimizzazione del trattamento del cancro colorettale". Coordinatore Alfredo Budillon
- Responsabile Scientifico dell'accordo di collaborazione di ricerca tra l'Istituto Regina Elena e la ditta Pharminox per lo sviluppo di composti ligandi il G-quadruplex telomeric.
- Responsabile Unità Operativa Progetto Ministero della Salute 2008-2009 "Novel approaches to improve erbB targeting therapies". Coordinatore Dr. Nicola Normanno
- Responsabile Progetto Triennale 2009-2011 finanziato dall' Associazione Italiana per la Ricerca sul Cancro "G-quadruplex DNA as target for the development of new anticancer

strategies."

- Responsabile Progetto Triennale 2014-2016 finanziato dall' Associazione Italiana per la Ricerca sul Cancro " Preclinical development of DNA Topoisomerase inhibitors-based combination for the treatment of colon cancer".
- Responsabile Progetto Triennale 2017-2019 finanziato dall' Associazione Italiana per la Ricerca sul Cancro " Molecular mechanism of quadruplex-targeted drugs: towards clinical candidate selection".

ABILITAZIONE SCIENTIFICA NAZIONALE

Idoneità di II fascia:

- 05/F1- Biologia applicata
- 05/F2- Biologia molecolare

BREVETTI

- Uso dell'acido zoledronico per la preparazione di formulazioni farmaceutiche per il trattamento del cancro della prostata e del mieloma multiplo. FI2009A000190
- Nanoparticelle autoassemblanti per il rilascio di bifosfonati nel trattamento di tumori. FI2010A000206.

SOCIETÀ SCIENTIFICHE DI APPARTENENZA

Società Italiana di Cancerologia (SIC)
Associazione Italiana di Colture Cellulari (ONLUS-AICC)

MEMBRO EDITORIAL BOARD

Journal of Experimental & Clinical Cancer Research

REVISIONE DI ARTICOLI PER RIVISTE SCIENTIFICHE

International Journal of Cancer
European Journal of Cancer
Molecular Cancer Therapeutics
FEBS Letters
Cancer Letters
BMC Cancer
Current Cancer Drug Targets
Journal of Experimental & Clinical Cancer Research
BMC Veterinary
Cancer Biology and Therapy
Nanomedicine

PUBBLICAZIONI "IN EXTENO"

- 1- C. Leonetti, I. D'Agnano, D. Del Bufalo, C.M. Carapella, G. Zupi. Human glioma lines as experimental model for biological and chemosensitivity studies. *J. Neurosurg. Sciences*, vol. 33, n° 1, 39-42, 1989.
- 2- C. Leonetti, G. Zupi, F. Calabresi, C. Greco. Schedule-dependent effectiveness of ADM and multiple cycles of DDP on a murine reticulum sarcoma. *Anticancer Res.*, vol. 10, 45-48, 1990.
- 3- L. Tentori, C. Leonetti, G. Lanzilli and E. Bonmassar. Role of IL-2 in the T-cell response inhibition induced by 5-(3,3' dimethyl-1-triazeno)-imidazole-4 carboxamide (DTIC). *Int. J. Immunopharmacol.*, vol. 12, n° 8, 831-840, 1990.
- 4- N. Laudonio, G. Zupi, E. Erba, C. Leonetti and M. D'Incalci. Synergism between 5-Fluorouracil and N-Methylformamide in HT29 human colon cancer line. *Br. J. Cancer*, vol. 61, 377-381, 1990.
- 5- D. Del Bufalo, C. Cucco, C. Leonetti. Utilizzazione di colture cellulari continue per lo studio della eterogeneità e della farmacosensibilità dei tumori. *Medicina*, vol. 10, n°3, 298-302, 1990.
- 6- G. Arancia, C. Leonetti, W. Malorni, C. Greco, G. Formisano, M. Marangolo and G. Zupi. Different effects of sequential combinations of N-methylformamide with 5-fluorouracil on human colon carcinoma cells growing in nude mice. *J. Cancer Res. Clin. Oncol.*, vol. 117, r. 351-358, 1991.
- 7- I. D'Agnano, V. Turchi, M. Nuti, C. Leonetti and G. Zupi. N-Methylformamide effects on cell proliferation and antigen expression in HT29 colon carcinoma cell line. *Cell proliferation*, 25, vol. 5, p. 299-309, 1992.
- 8- A. Sandrelli, P. De Fabritiis, A. Capua, F. Mandelli, G. Zupi and C. Leonetti. Pharmacological purging of syngeneic bone marrow ex vivo: effect of treatment with adriamycin and Ionidamine on normal and leukemic cells of DBA/2 mice. *Eur. J. Cancer*, vol. 28A, n° 10, p. 1633-1636, 1992.

- 9- C. Leonetti, T. Aronne, N. Konovalova, R. Diatchkovskaya, A. Shapiro and F. Franchi. Ruboxil, a new nitroxil derivative of daunorubicin: acute toxicity and antitumor effect in animals. *Int. J. Oncology*, vol. 3, n° 4, p. 615-618, 1993.
- 10- L. Tentori, C. Leonetti and A. Aquino. Temozolomide reduces the metastatic potential of Lewis Lung Carcinoma (3LL) in mice: role of α -6 integrin phosphorylation. *Eur. J. Cancer*, vol. 31A, n° 5, pp. 746-754, 1995.
- 11- P. Seminara, G. Bogdanov, G. Codacci Pisanelli, C. Leonetti, N. Konovalova, R. Diatchkovskaya, L. Gargano, T. Aronne, and F. Franchi. Comparative in vitro and in vivo study of a nitroxyl derivative of 5-fluorouracil (magnizil) on human gastrointestinal tumors. *Tumori*, vol. 81, n° 6, pp 278-282, 1995.
- 12- L. Tentori, C. Leonetti, F. Lozupone, E. Bonmassar. Antitumor and antimetastatic effects of Dacarbazine combined with Cyclophosphamide and IL-2 in Lewis Lung carcinoma (3LL). *Cancer Immun. Immunotherapy*, vol. 41, n° 6, pp 375-383, 1995.
- 13- C. Leonetti, I. D'Agnano, F. Lozupone, A. Valentini, T. Geiser, G. Zon, B. Calabretta, G. Citro and G. Zupi. In vitro and in vivo antitumor effect of c-myc antisense phosphorothioate oligodeoxynucleotides on human melanoma. *J Natl Cancer Inst*, vol. 88, No. 7:419-429, 1996.
- 14- D. Del Bufalo, C. Cucco, C. Leonetti, G. Citro, I. D'Agnano, M. Benassi, T. Geiser, G. Zon, B. Calabretta and G. Zupi. Effect of cisplatin and c-myb antisense phosphorothioate oligodeoxynucleotides combination on a human colon carcinoma cell line in vitro and in vivo. *Br. J. Cancer*, vol. 74: 387-393, 1996.
- 15- A. Nista, C. Leonetti, G. Bernardini, M. Mattioni and A. Santoni. Functional role of α 4 β 1 and α 5 β 1 integrin fibronectin receptors expressed on Adriamycin resistant MCF-7 human mammary carcinoma. *Int. J. Cancer* vol.72:133-141, 1997.
- 16- D. Del Bufalo, A. Biroccio, C. Leonetti, and G. Zupi. BCL-2 overexpression enhances the metastatic potential of a human breast cancer line. *FASEB J.* vol. 11:947-953, 1997.
- 17- D. Del Bufalo, C. Legnetti, B. Bucci, C. Amedeo, R. Falcioni, A. Biroccio, and G. Zupi. N-Methylformamide induces changes on adhesive properties and lung-colonising potential of M-14 melanoma cells. *Br J Cancer* vol. 77:210-215, 1998.
- 18- G. Citro, I. D'Agnano, C. Leonetti, R. Perini, B. Bucci, G.Zon, B. Calabretta and G. Zupi. c-myc antisense oligodeoxynucleotides enhance the efficacy of Cisplatin in melanoma chemotherapy in vitro in nude mice. *Cancer Res.* vol. 58:283-289, 1998.
- 19- Bruno T., Leonetti C., Aloe S., Iacobini C., Floridi A., Di Tondo U., Punturieri A., Fanciulli M. Levels of expression of hRPB11, a core subassembly subunit of human RNA polymerase II, affect doxorubicin sensitivity and cellular differentiation. *FEBS Lett* vol. 427:241-246, 1998.
- 20- Leonetti C., Biroccio A., Candiloro A., Citro G., Fornari C., Mottolese M., Del Bufalo D., Zupi G. Increase of cisplatin sensitivity by c-myc antisense oligodeoxynucleotides in a human metastatic melanoma inherently resistant to cisplatin. *Clin Cancer Res.* vol. 5: 2588-2595, 1999.
- 21- Putney S.D., Brown J., Cucco C., Lee R., Skorski T., Leonetti C., Geiser T., Calabretta B., Zupi G., Zon G. Enhanced anti-tumor effects with microencapsulated c-myc antisense oligonucleotide. *Antisense Nucleic Acid Drug Dev.* vol. 9:451-458, 1999.
- 22- Turco A., Scarpa S., Coppa A., Baccheschi G., Palumbo C., Leonetti C., Zupi G., Colletta G. Increased TGF β type II receptor expression suppresses the malignant phenotype and induces differentiation of human neuroblastoma cells. *Exp Cell Res.* vol. 255:77-85. 2000.
- 23- Fiumicino S., Martinelli S., Colussi C., Aquilina G., Leonetti C., Crescenzi M., Bignami M.. Sensitivity to DNA cross-linking chemotherapeutic agents in mismatch repair-defective cells in vitro and in xenografts. *Int J Cancer* vol. 85:590-596, 2000.
- 24- M. Giorgi, C. Leonetti, G. Citro and G. Augusti-Tocco. In vitro and in vivo inhibition of SK-N-MC neuroblastoma growth using cyclic nucleotide phosphodiesterase inhibitors. *J. Neuro-Oncology* vol. 51: 25-31, 2001.
- 25- C. Leonetti, A. Biroccio, B. Benassi, A. Stringaro, A. Stoppacciaro, S.C. Semple and G. Zupi. Encapsulation of c-myc antisense oligodeoxynucleotides in lipid particles improves antitumoral efficacy in vivo in a human melanoma line. *Cancer Gene Ther.* vol. 8: 459-68, 2001.
- 26- D. Del Bufalo, D. Trisciuglio, A. Biroccio, L. Marcocci, S. Buglioni, A. Candiloro, M. Scarsella, C. Leonetti and G. Zupi. Bcl-2 overexpression increases BCNU resistance of a human glioblastoma line through enhancement of catalase activity. *J. Cell. Biochem.* vol. 83: 473-483, 2001.
- 27- Supino R., Perego P., Gatti L., Caserini C., Leonetti C., Colantuono M., Zuco V., Carenini N., Zupi G., Zunino F. A role for c-myc in DNA damage-induced apoptosis in a human TP53-mutant small-cell lung cancer cell line. *Eur J Cancer* vol. 37: 2247-2256, 2001.
- 28- L. Tentori, C. Leonetti, M. Scarsella, G. D'Amati, I. Portarena, G. Zupi, E. Bonmassar, G. Graziani. Combined treatment with temozolomide and poly(ADP-ribose) polymerase inhibitor enhances survival of mice bearing hematological malignancy at the CNS site. *Blood*, vol. 99:2241-2244, 2002.
- 29- Biroccio A, Amodei S, Benassi B, Scarsella M, Cianciulli A, Mottolese M, Bufalo DD, Leonetti C, Zupi G. Reconstitution of hTERT restores tumorigenicity in melanoma-derived c-Myc low-

- expressin clones. *Oncogene* vol. 21: 3011-3019, 2002.
- 30- Pace A, Savarese A, Picardo M, Maresca V, Pacetti U, Del Monte G, Biroccio A, Leonetti C, Jandolo B, Cognetti F, Bove L. Neuroprotective effect of vitamin E supplementation in patients treated with cisplatin chemotherapy. *J Clin Oncol* vol. 21: 927-31, 2003.
- 31- Leonetti C, Biroccio A, Gabellini C, Scarsella M, Maresca V, Flori E, Bove L, Pace A, Stoppacciaro A, Zupi G, Cognetti F, Picardo M. Alpha-tocopherol protects against cisplatin-induced toxicity without interfering with antitumor efficacy. *Int J Cancer* vol. 104: 243-50, 2003.
- 32- Biroccio A, Leonetti C, Zupi G. The future of antisense therapy: combination with anticancer treatments. *Oncogene* vol. 22 :6579-88, 2003.
- 33- Tentori L, Leonetti C, Scarsella M, D'Amati G, Vergati M, Portarena I, Xu W, Kalish V, Zupi G, Zhang J, Graziani G. Systemic administration of GPI 15427, a novel poly(ADP-ribose) polymerase-1 inhibitor, increases the antitumor activity of temozolomide against intracranial melanoma, glioma, lymphoma. *Clin Cancer Res*. vol. 9 :5370-9, 2003.
- 34- C. Leonetti, M. Scarsella, S.C. Semple, A. Molinari, C. D'Angelo, A. Stoppacciaro, A. Biroccio and G. Zupi. In vivo administration of liposomal vincristine sensitizes drug-resistant human solid tumors *Int J Cancer* vol. 110: 767-74. 2004.
- 35- S. D'Alessio, F. Margheri, M. Pucci, A. Del Rosso, B.P. Monia, M. Bologna, C. Leonetti, M. Scarsella, G. Zupi, G. Fibbi, M. Del Rosso. Antisense oligodeoxynucleotides for urokinase-plasminogen activator receptor have anti-invasive and anti-proliferative effects in vitro and inhibit spontaneous metastases of human melanoma in mice. *Int J Cancer* vol. 110:125-33, 2004.
- 36- Messina S, Leonetti C, De Gregorio G, Affatigato V, Ragona G, Frati L, Zupi G, Santoni A, Porcellini A. Ras inhibition amplifies cisplatin sensitivity of human glioblastoma. *Biochem Biophys Res Commun*. 320:493-500, 2004.
- 37- A. Biroccio and C. Leonetti. Telomerase as a new target for the treatment of hormone-refractory prostate cancer. *Endocrine-Related Cancer*, 11: 407-421, 2004.
- 38- D. Del Bufalo, D. Trisciuoglio, M. Scarsella, G. D'Amati, A. Candiloro, A. Iervolino, C. Leonetti, G. Zupi. Lonidamine shows inhibition of critical steps in angiogenesis progression. *Neoplasia*, 6: 513-522, 2004.
- 39- Leonetti C., Amodei S., D'Angelo C., Rizzo A., Benassi B., Antonelli A., Elli R., Stevens M., D'Incalci M., Zupi G., Biroccio A. Biological Activity of the G-quadruplex Ligand RHPS4 is Associated with Telomere Capping Alteration. *Mol Pharmacol*. 66, 1138-1146, 2004.
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- 41- Zupi G., Scarsella M., Semple S. C., Mottolese M., Natali P. G. and Leonetti C. Antitumor efficacy of bcl-2 and c-myc antisense oligonucleotides in combination with cisplatin in human melanoma xenografts: relevance of administration sequence. *Clinical Cancer Res*. 11:1990-1995, 2005.
- 42- A. Tesei, P. Ulivi, F. Fabbri, M. Rosetti, C. Leonetti, M. Scarsella, G. Zupi, D. Amadori, M. Bolla and W. Zoli. In vitro and in vivo evaluation of NCX 4040 cytotoxic activity in human colon cancer cell lines. *Journal of Translational Med*. 2005, 3:7 (03 Feb 2005).
- 43- G. Zupi, M. Scarsella, C. D'Angelo, A. Biroccio, G. Paoletti, M. Lopez, C. Leonetti. Potentiation of the antitumoral activity of gemcitabine and paclitaxel in combination on human breast cancer cells. *Cancer Biology & Therapy*, 4: 866-871, 2005.
- 44- Tentori L, Leonetti C, Scarsella M, Muzy A, Vergati M, Forini O, Lacal PM, Ruffini F, Gold B, Li W, Zhang J, Graziani G. Poly(ADP-ribose) glycohydrolase inhibitor as chemosensitiser of malignant melanoma for temozolomide. *Eur J Cancer*, 41:2948-2957, 2005.
- 45- C. Leonetti, M. Scarsella, G. Zupi, W. Zoli, D. Amadori, L. Medri, F. Fabbri, M. Rosetti, P. Ulivi, L. Cecconetto, M. Bolla, A. Tesei. Efficacy of a nitric oxide-releasing nonsteroidal anti-inflammatory drug and cytotoxic drugs in human colon cancer cell lines in vitro and xenografts. *Mol Cancer Ther*, 5: 919-926, 2006.
- 46- Biroccio A, Rizzo A, Elli R, Koering CE, Belleville A, Benassi B, Leonetti C, Stevens MF, D'Incalci M, Zupi G, Gilson E. TRF2 inhibition triggers apoptosis and reduces tumourigenicity of human melanoma cells. *Eur J Cancer*, 42:1881-1888, 2006.
- 47- Vici P, Capomolla E, Foggi P, Carpano S, Conti F, Paoletti G, Cauchi C, Giacinti L, Leonetti C, Giannarelli D, Lopez M. High activity of salvage treatment with biweekly paclitaxel-gemcitabine combination in heavily pretreated breast cancer patients. *J Exp Clin Cancer Res*, 25:39-44, 2006.
- 48- Tentori L, Leonetti C, Scarsella M, Muzy A, Mazzon E, Vergati M, Forini O, Lapidus R, Xu W, Dorio AS, Zhang J, Graziani G. Inhibition of poly(ADP-ribose) polymerase prevents irinotecan-induced intestinal damage and enhances irinotecan/temozolomide efficacy against colon carcinoma. *FASEB J*. 20:1709-11, 2006.
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- and Chk2 kinases activate p53 transcription and the G2/M checkpoint. *Cancer Cell*, 10:473-86, 2006.
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- 51- Leonetti C and Zupi G. Targeting different signaling pathways with antisense oligonucleotides combination for cancer therapy. *Curr Pharm Des*, 13:463-70, 2007.
- 52- Leonetti C, Biroccio A, D'Angelo C, Semple SC, Scarsella M, Zupi G. Therapeutic integration of c-myc and bcl-2 antisense molecules with docetaxel in a preclinical model of hormone-refractory prostate cancer. *Prostate*, 67:1475-1485, 2007.
- 53- Tentori L, Lacal PM, Muzi A, Dorio AS, Leonetti C, Scarsella M, Ruffini F, Xu W, Min W, Stoppacciaro A, Colarossi C, Wang ZQ, Zhang J, Graziani G. Poly(ADP-ribose) polymerase (PARP) inhibition or PARP-1 gene deletion reduces angiogenesis. *Eur J Cancer*, 43: 2124-2133, 2007.
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- 60- Tentori L, Muzi A, Dorio AS, Scarsella M, Leonetti C, Shah GM, Xu W, Camaioni E, Gold B, Pellicciari R, Dantzer F, Zhang J, Graziani G. Pharmacological inhibition of Poly(ADP-ribose) Polymerase (PARP) activity in PARP-1 silenced tumour Cells increases chemosensitivity to Temozolomide and to a N3-Adenine selective methylating agent. *Curr Cancer Drug Targets*. 10:368-83, 2010.
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Autorizzo il trattamento dei miei dati personali ai sensi del D.L. n. 196 del 30 Giugno 2003.

Roma, 24-1-2020

In fede

Dr. Carlo Leonetti



A handwritten signature in black ink, appearing to read "Carlo Leonetti".