



CURRICULUM VITAE ASSUNTA LEDA BIORDI

PERSONAL INFORMATION	Assunta Leda Biordi Department of Biotechnological and Applied Clinical Sciences Street Vetoio, Angelo Camillo De Meis building, Coppito 2, Room B2/14 67100 L'Aquila Italy E-mail address (work):assuntaleda.biordi(at)univaq.it
CURRENT POSITION	Confirmed Researcher (Assistant Professor) in "General Pathology," SSD MED 04 at University of L'Aquila- Italy.
EDUCATION OTHER QUALIFICATIONS	1985 Degree in Medicine, University of L'Aquila 1985 Professional Medical qualification, University of L'Aquila 1987 AIRC Fellowship 1993 -PhD in Experimental Medicine, University of Rome "La Sapienza" 1996 Researcher Assistant, Dept of Experimental Medicine, University of L'Aquila 1997 Postgraduate School of Specialization in Oncology 2002 Researcher in general pathology, Dept of Experimental Medicine, Faculty of Medicine, University of L'Aquila, Italy.
ACADEMIC APPOINTMENTS	Member of the PhD Program Committee of the Doctoral program in "Experimental Medicine and Endocrinology" XX cycle University of L'Aquila Italy Member of the PhD Program Committee of the Doctoral program in "Experimental Medicine and Endocrinology" XXI cycle University of L'Aquila Italy Member of the PhD Program Committee of the Doctoral program in "Experimental Medicine and Endocrinology" XXII cycle University of L'Aquila Italy Member of the PhD Program Committee of the Doctoral program in "Experimental Medicine and Endocrinology" XXIII cycle University of L'Aquila Italy



UNIVERSITY OF L'AQUILA
DEPARTMENT OF
BIOTECHNOLOGICAL AND APPLIED CLINICAL SCIENCES



	<p>Member of the PhD Program Committee of the Doctoral program in "Experimental Medicine and Endocrinology" XXIV cycle University of L'Aquila Italy</p> <p>Member of the PhD Program Committee of the Doctoral program in "Experimental Medicine and Endocrinology" XXV cycle University of L'Aquila Italy</p> <p>Member of the PhD Program Committee of the Doctoral program in "Experimental Medicine and Endocrinology" XXVI cycle University of L'Aquila Italy</p> <p>Member of the PhD Program Committee of the Doctoral program in "Experimental Medicine and Endocrinology" XXVII cycle University of L'Aquila Italy</p> <p>Member of the PhD Program Committee of the Doctoral program in "Experimental Medicine and Endocrinology" XXVIII cycle University of L'Aquila Italy</p> <p>Member of the PhD Program Committee of the Doctoral program in "Experimental Medicine and Endocrinology" XXIX cycle University of L'Aquila Italy</p> <p>Member of the PhD Program Committee of the Doctoral program in "Experimental Medicine and Endocrinology" XXX cycle University of L'Aquila Italy</p>
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<p>TEACHING EXPERIENCE</p>	<p>Teaching Activity, in General, cellular and molecular Pathology (SSD MED/04), at University of L'Aquila</p> <p>From Academic year 2001/02 to Academic year 2006/07 First cycle degree Biomedical Laboratory Techniques- Molecular pathology course</p> <p>From Academic year 2002/03 to Academic year 2005/06 Second cycle degree Medical Biotechnology Methods of cell and tissue culture, of cell and tissue engineering</p> <p>From Academic year 2001/02 to date First cycle degree Dental Hygiene- general pathology course</p> <p>From Academic year 2002/03 to date First cycle degree -Imaging and Radiotherapy techniques- general pathology course</p> <p>From Academic year 2008/09 to date Single cycle degree Medicine and Surgery- cellular and molecular pathology course</p> <p>From Academic year 2016/2017 to date Specialization school in General Surgery- general pathology course</p>
<p>RESEARCH ACTIVITIES</p>	<p>1983/1985: graduate student at the Laboratory of General Pathology of the University of L'Aquila I began research on prostate cancer, research that I carried out as a basic research activity and developed in the following years up to today</p> <p>1987/1988 as an Airc Fellow I was involved in the study and production of monoclonal antibodies to be used in prostate cancer</p> <p>1989/1993 in the laboratory of General Pathology I carried out studies on cancer chemotherapy using the technique of "Determination of in vitro chemosensitivity of human neoplasms by short-term culture of tissue fragments" (after a course at the National Cancer Institute in Milan) for test the sensitivity of tumors to various chemotherapeutic agents for the purpose of targeted therapy</p> <p>1993/1998 I worked on molecular diagnostics at the molecular biology laboratory. In particular, I participated in the development and validation of molecular analyzes relating to the clinical identification of HCV (nested PCR technique), cystic fibrosis (PCR and sequencing) and Y chromosome microdeletions (PCR). In particular have been analyzed in the reference period about 400 patients for the diagnosis of HCV;</p>



	<p>From 2003 to 2009 I collaborated with the Department of Preclinical Pharmacology of the Dompè Research Center through the research project "Genotyping the offspring of knockout mice heterozygous for the CXCR2 receptor". Scientific Responsible of Research Fund of University (ex 60% and RIA) Department of Experimental Medicine/Department of Biotechnological and Applied Clinical Sciences</p> <p>PRIN 2004-2006 Partecipant in the Research program. Project title "Fattori di transattivazione bifunzionali nei cancri della cute". Principal Investigation Prof. Alberto Gulino; Scientific Coordinator Prof Edoardo Alesse</p> <p>PRIN 2007-2009 Partecipant in the Research Program. Project title "Identificazione delle pathways che cooperano con Hedgehog nella genesi del medulloblastoma: ruolo dei fattori di trascrizione NF-kB". Principal Investigation Prof. Alberto Gulino; Scientific Coordinator Prof Edoardo Alesse</p> <p>PRIN 2010-2012 Partecipant in the research program. Project title: "Ruolo dell'acetilazione di E2F1 nella risposta cellulare al danno al DNA "Principal Investigation Prof. Alberto Gulino; Scientific Coordinator Prof Edoardo Alesse</p> <p>Research in recent years has focused on the study of tumor development and progression through two main lines: 1) study of new targets and their involvement in cell proliferation and tumors 2) analysis of the role played by inflammatory factors mainly aimed at understanding the inflammatory circuits expressed in the tumor microenvironment and the molecular events that govern them.</p> <p>The studies are aimed above all at the study of prostate cancer, but the interest in tumor progression and therapeutic strategies subsequently directed research to the study of glioblastomas, primary tumors of the central nervous system characterized by a disastrous prognosis in which losses are frequent. chromosome region 17p (containing TP53) in the early stages of development and that of chromosome 10 in the more advanced stages of the tumor.</p> <p>From 2020 I participate in an experimental project PON entitled "Origami" (BiORaffineria InteGratA for the production of biodiesel from microalgae), Scientific Responsible Prof. M. Benedetta Mattei, with the aim of transforming agricultural and industrial waste biodiesel, a fuel for sustainable and economically convenient air transport, through the use of microalgae.</p>
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RESPONSIBILITY IN ACADEMIC ACTIVITIES	Member of the Board of Directors of the University Language Center as representative of the Department of Applied Clinical Sciences and Biotechnology from 2019
SCIENTIFIC ACHIEVEMENTS BIBLIOMETRIC INDICATORS	Scopus Author ID: http://orcid. 0000-0003-4508-9101 57214681184 6602835377
SELECTED PUBLICATIONS	<p>1) <u>Targeted Molecular Therapy in Glioblastoma.</u> Festuccia C, Biordi AL, Tombolini V, Hara A, Bailey D. J Oncol. 2020 Jan 14;2020:5104876. doi: 10.1155/2020/5104876. eCollection 2020. PMID: 32411237 Free PMC article.</p> <p>2) <u>The Botanical Drug PBI-05204, a Supercritical CO₂ Extract of Nerium Oleander, Inhibits Growth of Human Glioblastoma, Reduces Akt/mTOR Activities, and Modulates GSC Cell-Renewal Properties.</u> Colapietro A, Yang P, Rossetti A, Mancini A, Vitale F, Martellucci S, Conway TL, Chakraborty S, Marampon F, Mattei V, Gravina GL, Biordi AL, Wei D, Newman RA, Festuccia C. Front Pharmacol. 2020 Sep 11;11:552428. doi: 10.3389/fphar.2020.552428. eCollection 2020. PMID: 33013390 Free PMC article</p> <p>3) <u>The Brain Penetrating and Dual TORC1/TORC2 Inhibitor, RES529, Elicits Anti-Glioma Activity and Enhances the Therapeutic Effects of Anti-Angiogenetic Compounds in Preclinical Murine Models.</u> Gravina GL, Mancini A, Colapietro A, Delle Monache S, Sferra R, Pompili S, Vitale F, Martellucci S, Marampon F, Mattei V, Biordi L, Sherris D, Festuccia C. Cancers (Basel). 2019 Oct 21;11(10):1604. doi: 10.3390/cancers11101604. PMID: 31640252</p> <p>4) <u>Dual PI3K/mTOR inhibition reduces prostate cancer bone engraftment altering tumor-induced bone remodeling.</u> Mancini A, Colapietro A, Pompili S, Del Fattore A, Delle Monache S, Biordi LA, Angelucci A, Mattei V, Liang C, Gravina GL, Festuccia C. Tumour Biol. 2018 Apr;40(4):1010428318771773. doi: 10.1177/1010428318771773</p> <p>5) <u>Pharmacological treatment with inhibitors of nuclear export enhances the antitumor activity of docetaxel in human prostate cancer.</u> Gravina GL,</p>



Mancini A, Colapietro A, Marampon F, Sferra R, Pompili S, Biordi LA, Iorio R, Flati V, Argueta C, Landesman Y, Kauffman M, Shacham S, Festuccia C. *Oncotarget*. 2017 Nov 30;8(67):111225-111245. doi: 10.18632/oncotarget.22760. eCollection 2017 Dec 19.

Correction: . *Oncotarget*. 2019 Oct 29;10(59):6393-6395. doi: 10.18632/oncotarget.27289. eCollection 2019 Oct 29. PMID: 31695847

6) Increased expression and activity of p75NTR are crucial events in azacitidine-induced cell death in prostate cancer. Gravina GL, Marampon F, Sanità P, Mancini A, Colapietro A, Scarsella L, Jitariuc A, **Biordi L**, Ficorella C, Festuccia C. *Oncol Rep*. 2016 Jul;36(1):125-30. doi: 10.3892/or.2016.4832. Epub 2016 May 23.

7) CXCR4 pharmacological inhibition reduces bone and soft tissue metastatic burden by affecting tumor growth and tumorigenic potential in prostate cancer preclinical models. Gravina GL, Mancini A, Muzi P, Ventura L, **Biordi L**, Ricevuto E, Pompili S, Mattei C, Di Cesare E, Jannini EA, Festuccia C. *Prostate*. 2015 Sep;75(12):1227-46. doi: 10.1002/pros.23007. Epub 2015 Jun 12.

8) The TORC1/TORC2 inhibitor, Palomid 529, reduces tumor growth and sensitizes to docetaxel and cisplatin in aggressive and hormone-refractory prostate cancer cells. Gravina GL, Marampon F, L, Sherris D, Jannini EA V, Tombolini, Festuccia C. Petini F, **Biordi L** -*Endocr Relat Cancer*. 2011 Jul 1-18 (4):385-400. doi: 10.153015) Print 2011 Au/ERC-11-0045

9) Antitumor effects of carnitinib in castration resistant prostate cancer models: A Comparative study with erlotinib. Gravina GL, Marampon F, Piccolella M, **Biordi L**, Ficorella C, Motta M, Jannini EA, Tombolini V, Festuccia C. *Prostate*. 2011 Mar 28. doi: 10.1002/pros.21363. [Epub ahead of print]

10) Epigenetic modulation of PTEN expression during antiandrogenic therapies in human prostate cancer. Gravina GL, **Biordi L**, Martella F, Flati V, Ricevuto E, Ficorella C, Tombolini V, Festuccia C. *Int J Oncol*. 2009 Nov; 35 (5):1133-9.

11) Effects of EGFR tyrosine kinase inhibitor erlotinib in prostate cancer cells in vitro. Festuccia C, Gravina GL, **Biordi L**, D'Ascenzo S, Dolo V, Ficorella C, Ricevuto E, Tombolini V. *Prostate*. 2009 Oct 1;69(14):1529-37.

12) Biomolecular characterization of human glioblastoma cells in primary cultures: differentiating and antiangiogenic effects of natural and synthetic PPARgamma agonists. Benedetti E, Galzio R, Cinque B, **Biordi L**, D'Amico MA, D'Angelo B, Laurenti G, Ricci A, Festuccia C, Cifone MG, Lombardi D, Cimini A. *J Cell Physiol*. 2008 Oct; 217(1):93-102. doi: 10.1002/jcp.21479.10

13) Chemokine MIP-2/CXCL2, acting on CXCR2, induces motor neuron death in primary cultures. De Paola M, Buane P, **Biordi L**, Bertini R, Ghezzi



P, Mennini T. Neuroimmunomodulation. 2007;14 (6):310-6. doi: 10.1159/000123834. Epub 2008 Apr 3.

14) Gefitinib and bicalutamide show synergistic effects in primary cultures of prostate cancer derived from androgen-dependent naive patients. Festuccia C, Gravina GL, Muzi P, **Biordi L**, Ronchi P, Martella O, Vicentini C, Bologna M. Oncol Rep. 2007 Nov;18(5):1321-7.

15) Crucial pathophysiological role of CXCR2 in experimental ulcerative colitis in mice. Buanne P, Di Carlo E, Caputi L, Brandolini L, Mosca M, Cattani F, Pellegrini L, **Biordi L**, Coletti G, Sorrentino C, Fedele G, Colotta F, Melillo G, Bertini R. J Leukoc Biol. 2007 Nov;82(5):1239-46. Epub 2007 Jul 26.

16) Differential expression of the components of the plasminogen activating system in human thyroid tumour derived cell lines and papillary carcinomas. Ulisse S, Baldini E, Toller M, Marchioni E, Giacomelli L, De Antoni E, Ferretti E, Marzullo A, Graziano FM, Trimboli P, **Biordi L**, Curcio F, Gulino A, Ambesi-Impiombato FS, D'Armiento M. Eur J Cancer. 2006 Oct;42(15):2631-8. Epub 2006 Aug 22.

17) The role of CXCR2 activity in the contact hypersensitivity response in mice. Cattani F, Gallese A, Mosca M, Buanne P, **Biordi L**, Francavilla S, Coletti G, Pellegrini L, Melillo G, Bertini R. Eur Cytokine Netw. 2006 Mar;17(1):42-8.

18) Molecular aspects of gefitinib antiproliferative and pro-apoptotic effects in PTEN-positive and PTEN-negative prostate cancer cell lines. Festuccia C, Muzi P, Millimaggi D, **Biordi L**, Gravina GL, Specca S, Angelucci A, Dolo V, Vicentini C, Bologna M. Endocr Relat Cancer. 2005 Dec; 12 (4):983-98.

19) Epidermal growth factor modulates prostate cancer cell invasiveness regulating urokinase-type plasminogen activator activity. EGF-receptor inhibition may prevent tumor cell dissemination. Festuccia C, Angelucci A, Gravina GL, **Biordi L**, Millimaggi D, Muzi P, Vicentini C, Bologna M. Thromb Haemost. 2005 May ;93 (5):964-75

20) Expression of matrix metalloproteinases and their specific inhibitors in normal and different human thyroid tumor cell lines. Baldini E, Toller M, Graziano FM, Russo FP, Pepe M, **Biordi L**, Marchioni E, Curcio F, Ulisse S, Ambesi-Impiombato FS, D'Armiento M. Thyroid.2004 Nov; 14 (11):881-8.

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- 30) Establishment and characterization of a human prostatic carcinoma cell strain obtained from exfoliated tumor cells after prostatic massage. Bologna M, Festuccia C, Vicentini C, Muzi P, **Biordi L**, De Nicola G, Ventura T. Tumori. 1991 Feb 28;77(1):70-5.
- 31) Determination of imipenem in human plasma, urine and tissue by high-performance liquid chromatography. Carlucci G, **Biordi L**, Vicentini C, Bologna M. J Pharm Biomed Anal. 1990;8(3):283-6.



- 32) Bombesin stimulates growth of human prostatic cancer cells in vitro.
Bologna M, Festuccia C, Muzi P, **Biordi L**, Ciomei M.
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- 33) Determination of famotidine in plasma, urine and gastric juice by high-performance liquid chromatography using disposable solid-phase extraction columns.
Carlucci G, **Biordi L**, Napolitano T, Bologna M. J Pharm Biomed Anal. 1988;6(5):515-9. No abstract available.
- 34) Study of plasma, urine and gastric juice concentrations of famotidine using high performance liquid chromatography.
Bologna M, **Biordi L**, Napolitano T, Carlucci G. Int J Clin Pharmacol Res. 1988;8(5):335-40.
- 35) Short-term tissue culture of prostatic carcinoma samples provides useful biological parameters related to patient prognosis.
Bologna M, Vicentini C, Festuccia C, Muzi P, Napolitano T, **Biordi L**, Miano L.
Eur Urol. 1988;15 (3-4):243-7.
- 36) Early diagnosis of prostatic carcinoma based on in vitro culture of viable tumor cells harvested by prostatic massage. Bologna M, Vicentini C, Festuccia C, Muzi P, Napolitano T, **Biordi L**, Miano L. Eur Urol. 1988;14(6):474-6.
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