

# Europass Curriculum Vitae

## Personal information

First name(s) / Surname(s) **Chiara Liverani**

Occupational field **Graduate biotechnologist**

## Work experiences

Dates	<b>01/2011-present</b>
Occupation or position held	Researcher
Main activities and responsibilities	Laboratory researcher. Main activities: cell cultures, proliferation assays, RNA, DNA and protein extraction, qPCR, immunoblotting, 3D cultures, immunofluorescence, immunohistochemistry. Conceiving translational studies. Writing scientific papers, grants/fellowships.
Name and address of employer	<b>Osteoncology and Rare Tumors Center, IRCCS Istituto scientifico romagnolo per lo studio e la cura dei tumori (IRST)</b> 40, Piero Maroncelli rd, 47014 Meldola (FC) Italy
Type of business or sector	Translational and preclinical research
Dates	<b>12/2016-05/2017</b>
Occupation or position held	Visiting Scientist
Main activities and responsibilities	Laboratory researcher. Main activities: Development and validation of innovative nanosystems for anticancer therapy. Projects topic: <i>In vitro</i> and <i>in vivo</i> validation of a targeted nanoparticle to treat breast cancer.
Name and address of employer	<b>The Methodist Hospital Research Institute, 6670 Bertner Ave, Houston, TX 77030</b>
Type of business or sector	Translational research
Dates	<b>07/2012-12/2012</b>
Occupation or position held	Visiting Scientist
Main activities and responsibilities	Laboratory researcher. Main activities: application of tridimensional biomimetic collagen scaffolds for breast cancer and mesenchymal stem cells culture. Projects topic: Study of breast cancer progression, metastasis initiation and response to therapy on three dimensional biomimetic scaffolds.
Name and address of employer	<b>The Methodist Hospital Research Institute, 6670 Bertner Ave, Houston, TX 77030</b>
Type of business or sector	Translational research
Dates	<b>09/2010-12/2010</b>
Occupation or position held	Trainee within the Lifelong Learning Programme – Leonardo da Vinci Programme
Main activities and responsibilities	Laboratory researcher. Main activities: cell cultures, cell transfection, pull down and microscopy techniques. Project topic: The Cyclase-associated Protein CAP as Regulator of chemotaxis process in <i>Dictyostelium Discoideum</i> .
Name and address of employer	<b>Cardiff school of bioscience</b>
Type of business or sector	Scientific research

<b>Dates</b>	<b>04/2010-08/2010</b>
Occupation or position held	Unpaid experience
Main activities and responsibilities	Laboratory researcher. Main activities: immunoblotting, DNA and RNA extraction, RT-PCR.
Name and address of employer	<b>Bioscience laboratory, Istituto scientifico romagnolo per lo studio e la cura dei tumori (IRST)</b> 40, Piero Maroncelli rd, 47014 Meldola (FC) Italy.
Type of business or sector	Scientific research
<b>Dates</b>	<b>02/2009 - 04/2010</b>
Occupation or position held	Trainee
Main activities and responsibilities	Laboratory researcher. Main activities: cell cultures, proliferation assays, immunoblotting, DNA and RNA extraction, qPCR. Project topic: Study of the role of the gene Slug in the response to chemotherapy and radiotherapy on human melanoma cells.
Name and address of employer	<b>Bioscience laboratory, Istituto scientifico romagnolo per lo studio e la cura dei tumori (IRST)</b> 40, Piero Maroncelli rd, 47014 Meldola (FC) Italy.
Type of business or sector	Scientific research
<b>Dates</b>	<b>10/2006 - 07/2007</b>
Occupation or position held	Trainee
Main activities and responsibilities	Laboratory researcher. Main activities: cell cultures, citometry, microarray.
Name and address of employer	<b>Sant'Orsola Malpighi Polyclinic, division of pediatric oncohematology Lalla Seragnoli</b> <b>9, Massarenti rd, 40138 Bologna Italy.</b> Project topic: Oxaliplatin and Docetaxel activity on pediatric solid tumors.
Type of business or sector	Scientific research
<b>Education and training</b>	
<b>Dates</b>	<b>01/2014-present</b>
Title of qualification awarded	PhD
Principal subjects/occupational skills covered	Biomedical Engineering
Name and type of organisation providing education and training	Alma Mater Studiorum Università degli Studi di Bologna
Level in national or international classification	PhD
<b>Dates</b>	<b>11/2007 - 04/2010</b>
Title of qualification awarded	Degree in medical and pharmaceutical biotechnology
Principal subjects/occupational skills covered	Biomaterials, English language, cells and molecular therapy in medicine, data analysis, molecular engineering, design of pharmaceutical biomolecules, control and production of drugs, pharmaceutical and organic chemistry, advanced techniques for biomolecules analysis, pharmacognosy techniques and advanced pharmacology, food chemistry
Name and type of organisation providing education and training	Università degli studi di Modena e Reggio Emilia, Faculty of Bioscience and Biotechnology
Level in national or international classification	Second level Degree/ Master's Degree
<b>Dates</b>	<b>23/07/2007 - 06/08/2007</b>
Title of qualification awarded	Certificate of attendance

Principal subjects/occupational skills covered	English language: understanding, speaking, writing																																								
Name and type of organisation providing education and training	Atlantic language Galway, Fairgreen House, Fairgreen Road, Galway, Ireland																																								
Dates	10/2003 - 06/2007																																								
Title of qualification awarded	Degree in Biotechnology (pharmaceutical curriculum)																																								
Principal subjects/occupational skills covered	Mathematic and informatics, general and inorganic chemistry, organic chemistry, biodiversity and microorganism evolution, biochemistry, molecular biology of cells, juridical notions and bioethics, economy, microbiology and virology, medical microbiology, pharmacology, anatomy and physiology, general genetics, molecular genetics of microorganism, physic and statistics, cellular and molecular immunology, work psychology, English language, laboratory techniques																																								
Name and type of organisation providing education and training	Alma mater studiorum, Università di Bologna, Faculty of Mathematical, Physical and Natural Sciences.																																								
Level in national or international classification	First level Degree/ Bachelor's Degree																																								
Dates	2001 – 2002																																								
Title of qualification awarded	Diploma of French Language (DELF 1er degré)																																								
Principal subjects/occupational skills covered	French language: understanding and writing, general																																								
Name and type of organisation providing education and training	Minister of National Education of French Republic																																								
Personal skills and competences																																									
Mother tongue(s)	Italian																																								
Other language(s)																																									
Self-assessment																																									
European level (*)																																									
English																																									
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	(*) <a href="#">Common European Framework of Reference for Languages</a>																																								
Social skills and competences	Good teamworking skills and professional communication, developed thanks to a continuous collaboration with different professional figures																																								
Technical skills and competences	Good knowledge of laboratory techniques in particular cells cultures, proliferation assays, immunoblotting, PCR, DNA, protein and RNA extraction, 3D cultures, microscopy techniques and basic knowledge of citometry and microarray																																								
Computer skills and competences	Good knowledge of Office packet, in particular word and excel. Basic Knowledge of analysis programs, GraphPad and Bioedit																																								
Driving licence	Car driving licence: Patente B																																								

## Oral communication

National meeting of the Italian Society of Osteoncology (ISO) 2013: The activity of bone-targeted drugs in *in vitro* coculture systems of breast cancer and bone cells.

National meeting of the Italian Society of Osteoncology (ISO) 2015: Modeling tumors with tridimensional biomimetic scaffolds: the bone metastatic niche of breast cancer

## Papers

- 1) **Liverani C**, Mercatali L, Cristofolini L, Giordano E, Minardi S, Della Porta G, De Vita A, Miserocchi G, Spadazzi C, Tasciotti E, Amadori D, Ibrahim T. Investigating the Mechanobiology of Cancer Cell-ECM Interaction Through Collagen-Based 3D Scaffolds. *Cel. Mol. Bioeng.* (2017) 10: 223.
- 2) De Vita A, Recine F, Mercatali L, Miserocchi G, **Liverani C**, Spadazzi C, Casadei R, Bongiovanni A, Pieri F, Riva N, Amadori D, Ibrahim T. Myxofibrosarcoma primary cultures: molecular and pharmacological profile. *Ther Adv Med Oncol.* 2017 Dec;9(12):755-767.
- 3) De Vita A, Recine F, Mercatali L, Miserocchi G, Spadazzi C, **Liverani C**, Bongiovanni A, Pieri F, Casadei R, Riva N, Fausti V, Amadori D, Ibrahim T. Primary Culture of Undifferentiated Pleomorphic Sarcoma: Molecular Characterization and Response to Anticancer Agents. *Int J Mol Sci.* 2017 Dec 8;18(12).
- 4) Bongiovanni A, Recine F, Celli M, Marcantognini G, Foca F, **Liverani C**, Fausti V, De Vita A, Miserocchi G, Mercatali L, Amadori D, Ibrahim T. Osteoblastic bone metastases from neuroendocrine tumor (NET) of unknown origin detected by 18fluorocholine PET/CT and its comparison with 68gallium-DOTATOC PET/CT: Case report and review of the literature. *Medicine (Baltimore).* 2017 Nov;96(46):e8567. Review.
- 5) Recine F, Bongiovanni A, Casadei R, Pieri F, Riva N, De Vita A, Mercatali L, **Liverani C**, Spadazzi C, Miserocchi G, Fausti V, Amadori D, Ibrahim T. Primary leiomyosarcoma of the bone: a case report and a review of the literature. *Medicine (Baltimore).* 2017 Nov;96(45):e8545. Review.
- 6) Miserocchi G, Mercatali L, **Liverani C**, De Vita A, Spadazzi C, Pieri F, Bongiovanni A, Recine F, Amadori D, Ibrahim T. Management and potentialities of primary cancer cultures in preclinical and translational studies. *J Transl Med.* 2017 Nov 7;15(1):229. Review.
- 7) Mercatali L, Spadazzi C, Miserocchi G, **Liverani C**, De Vita A, Bongiovanni A, Recine F, Amadori D, Ibrahim T. Development of a Human Preclinical Model of Osteoclastogenesis from Peripheral Blood Monocytes Co-cultured with Breast Cancer Cell Lines. *J Vis Exp.* 2017 Sep 13;(127).
- 8) Mercatali L, La Manna F, Miserocchi G, **Liverani C**, De Vita A, Spadazzi C, Bongiovanni A, Recine F, Amadori D, Ghetti M, Ibrahim T. Tumor-Stroma Crosstalk in Bone Tissue: The Osteoclastogenic Potential of a Breast Cancer Cell Line in a Co-Culture System and the Role of EGFR Inhibition. *Int J Mol Sci.* 2017 Jul 29;18(8).
- 9) Recine F, Bongiovanni A, Riva N, Fausti V, De Vita A, Mercatali L, **Liverani C**, Miserocchi G, Amadori D, Ibrahim T. Update on the role of trabectedin in the treatment of intractable soft tissue sarcomas. *Onco Targets Ther.* 2017 Feb 23;10:1155-1164. Review.
- 10) Recine F, Bongiovanni A, Riva N, Fausti V, De Vita A, Mercatali L, **Liverani C**, Miserocchi G, Amadori D, Ibrahim T. Update on the role of trabectedin in the treatment of intractable soft tissue sarcomas. *Onco Targets Ther.* 2017 Feb 23;10:1155-1164. Review.
- 11) Amadori D, Serra P, Masalu N, Pangan A, Scarpi E, Bugingo AM, Katabalo D, Ibrahim T, Bongiovanni A, Miserocchi G, Spadazzi C, **Liverani C**, Turri V, Tedaldi R, Mercatali L. Vitamin D receptor polymorphisms or serum levels as key drivers of breast cancer development? The question of the vitamin D pathway. *Oncotarget.* 2017 Feb 21;8(8):13142-13156.
- 12) Bongiovanni A, Recine F, Riva N, Foca F, **Liverani C**, Mercatali L, Nicolini S, Pieri F, Amadori D, Ibrahim T. Outcome Analysis of First-line Somatostatin Analog Treatment in Metastatic Pulmonary Neuroendocrine Tumors and Prognostic Significance of 18FDG-PET/CT. *Clin Lung Cancer.* 2017 Jul;18(4):415-420.

- 13) De Vita A, Miserocchi G, Recine F, Mercatali L, Pieri F, Medri L, Bongiovanni A, Cavaliere D, **Liverani C**, Spadazzi C, Amadori D, Ibrahim T. Activity of Eribulin in a Primary Culture of Well-Differentiated/Dedifferentiated Adipocytic Sarcoma. *Molecules*. 2016 Dec 3;21(12).
- 14) **Liverani C**, La Manna F, Groenewoud A, Mercatali L, Van Der Pluijm G, Pieri F, Cavaliere D, De Vita A, Spadazzi C, Miserocchi G, Bongiovanni A, Recine F, Riva N, Amadori D, Tasciotti E, Snaar-Jagalska E, Ibrahim T. Innovative approaches to establish and characterize primary cultures: an ex vivo 3D system and the zebrafish model. *Biol Open*. 2017 Feb 15;6(2):133-140.
- 15) Mercatali L, Spadazzi C, Miserocchi G, **Liverani C**, De Vita A, Bongiovanni A, Recine F, Amadori D, Ibrahim T. The Effect of Everolimus in an In Vitro Model of Triple Negative Breast Cancer and Osteoclasts. *Int J Mol Sci*. 2016 Nov 1;17(11).
- 16) De Vita A, Mercatali L, Recine F, Pieri F, Riva N, Bongiovanni A, **Liverani C**, Spadazzi C, Miserocchi G, Amadori D, Ibrahim T. Current classification, treatment options, and new perspectives in the management of adipocytic sarcomas. *Onco Targets Ther*. 2016 Oct 11;9:6233-6246.
- 17) Ibrahim T, Ricci M, Scarpi E, Bongiovanni A, Ricci R, Riva N, **Liverani C**, De Vita A, La Manna F, Oboldi D, Serra P, Foca F, Cecconetto L, Amadori D, Mercatali L. RANKL: A promising circulating marker for bone metastasis response. *Oncol Lett*. 2016 Oct;12(4):2970-2975.
- 18) Bongiovanni A, Monti M, Foca F, Recine F, Riva N, Di Iorio V, **Liverani C**, De Vita A, Miserocchi G, Mercatali L, Amadori D, Ibrahim T. Recombinant granulocyte colony-stimulating factor (rG-CSF) in the management of neutropenia induced by anthracyclines and ifosfamide in patients with soft tissue sarcomas (NEUSAR). *Support Care Cancer*. 2017 Jan;25(1):111-117.
- 19) Mercatali L, La Manna F, Groenewoud A, Casadei R, Recine F, Miserocchi G, Pieri F, **Liverani C**, Bongiovanni A, Spadazzi C, de Vita A, van der Pluijm G, Giorgini A, Biagini R, Amadori D, Ibrahim T, Snaar-Jagalska E. Development of a Patient-Derived Xenograft (PDX) of Breast Cancer Bone Metastasis in a Zebrafish Model. *Int J Mol Sci*. 2016 Aug 22;17(8).
- 20) Bongiovanni A, Riva N, Ricci M, Mercatali L, **Liverani C**, La Manna F, De Vita A, Cavaliere D, Pieri F, Oboldi D, Verdecchia GM, Amadori D, Ibrahim T. Long-lasting activity of trabectedin in refractory uterine leiomyosarcoma: a case report. *BMC Cancer*. 2015 Dec 22;15:998.
- 21) Bongiovanni A, Riva N, Ricci M, **Liverani C**, La Manna F, De Vita A, Foca F, Mercatali L, Severi S, Amadori D, Ibrahim T. First-line chemotherapy in patients with metastatic gastroenteropancreatic neuroendocrine carcinoma. *Onco Targets Ther*. 2015 Dec 3;8:3613-9.
- 22) Bongiovanni A, Ricci M, Riva N, Calpona S, Oboldi D, Pieri F, Cavaliere D, Mercatali L, **Liverani C**, La Manna F, De Vita A, Foca F, Gunelli E, Amadori D, Ibrahim T. Pleural effusion in a patient with metastatic gastrointestinal stromal tumor treated with imatinib: case report. *Future Oncol*. 2014 Dec;10(15):2423-7.
- 23) Bongiovanni A, Riva N, Calpona S, Ricci M, Gunelli E, **Liverani C**, La Manna F, De Vita A, Monti M, Severi S, Pieri F, Amadori E, Galassi R, Cavaliere D, Zaccaroni A, Tartaglia A, Lunedei V, Gardini A, Mercatali L, Amadori D, Ibrahim T. Metronomic capecitabine in gastroenteropancreatic neuroendocrine tumors: a suitable regimen and review of the literature. *Onco Targets Ther*. 2014 Oct 20;7:1919-26.
- 24) Ricci M, Amadori E, Chiesa F, Bongiovanni A, **Liverani C**, Fabbri L, Falasconi MC, Casadei R, Oboldi D, Galassi R, Micheletti S, Severi S, Serra L, Pieri F, Calabrese L, Riva N, Calpona S, Gunelli E, Mercatali L, Amadori D, Ibrahim T. Single bone metastasis from adenocarcinoma of the lacrimal gland: a case report. *Future Oncol*. 2014 Aug;10(10):1735-9.

- 25) **Liverani C**, Mercatali L, Spadazzi C, La Manna F, De Vita A, Riva N, Calpona S, Ricci M, Bongiovanni A, Gunelli E, Zannoni M, Fabbri F, Zoli W, Amadori D, Ibrahim T. CSF-1 blockade impairs breast cancer osteoclastogenic potential in co-culture systems. *Bone*. 2014 Sep;66:214-22.
- 26) Mercatali L, Ricci M, Scarpi E, Serra P, Fabbri F, Ricci R, **Liverani C**, Zannoni M, Zoli W, Maltoni R, Gunelli E, Amadori D, Ibrahim T. RANK/RANK-L/OPG in Patients with Bone Metastases Treated with Anticancer Agents and Zoledronic Acid: A Prospective Study. *Int J Mol Sci*. 2013 May 23;14(6):10683-93.
- 27) Ibrahim T, **Liverani C**, Mercatali L, Sacanna E, Zannoni M, Fabbri F, Zoli W, Amadori D. Cisplatin in combination with zoledronic acid: a synergistic effect in triple-negative breast cancer cell lines. *Int J Oncol*. 2013 Apr;42(4):1263-70.
- 28) Ibrahim T, Mercatali L, Sacanna E, Tesei A, Carloni S, Ulivi P, **Liverani C**, Fabbri F, Zannoni M, Zoli W, Amadori D. Inhibition of breast cancer cell proliferation in repeated and non-repeated treatment with zoledronic acid. *Cancer Cell Int*. 2012 Nov 22;12(1):48.