

EUROPEAN FORMAT CURRICULUM VITAE



PERSONAL INFORMATION



Name / Surname / Qualification

MARCO GIALLOMBARDO, BSc, MSc, PhD student

Address

Telephone

E-mail

Citizenship

Italian

Date of birth

Linkedin

<https://be.linkedin.com/pub/marco-giallombardo/100/395/ab7>

SUMMARY

*Born in Palermo, Italy in 1988. He studied at the University of Palermo achieving a **BSc** in Medical Biotechnologies in 2011 acquiring a vast knowledge in Molecular Biology and Genetic Engineering. Thereafter in 2013 he obtained a **MSc** in Medical Biotechnology and Molecular Medicine performing in depth studies on Cell Culture, Exosomes from conditional media and body fluids (plasma, serum) and Proteomics. His previous dissertations One on expression and purification of a fusion protein GST-Strim and the other on Proteomic profiling of MDX mice quadriceps after aerobic exercise, and his personal inclination gave him a strong background regarding the research activity. In 2014 his project, regarding the role of exosomes released by chronic myelogenous leukemia cells in the cross-talk with the tumor microenvironment, has led him to win an International **PhD student** position for Experimental Oncology and Surgery. Moreover, he win a PON grant. In the same year he achieved the Senior Biologist License and the License for animal experimentation in vivo. He performed one year research period abroad (Antwerp, Belgium) working on exosomes from patient's plasma/serum, already resulted in several publications as Papers, Posters, Abstracts and Book Chapters. His deep fascination for biotechnologies and human biology led him to a regular improvement of his knowledges and qualification through seminaries, workshops and congresses. He would be really interested in a position within the field of cancer research.*

EXPERIENCE

- Date
- Institution name
- Sector

FROM JANUARY 2014 UNTIL TODAY (END: MARCH 2017)

University of Palermo, Biopathology and Medical Biotechnology Department - Antwerpen University (Belgium).

Scientific Research

- Position International PhD student in Experimental Oncology and Surgery
 - Main tasks Evaluation of the role of exosomes released by chronic myelogenous leukemia cells in the cross-talk with the tumor microenvironment,
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- Date **2015**
 - Institution name Antwerp University Hospital, Edegem, (Belgium)
 - Sector Clinic and translational research
 - Position PhD student
 - Main tasks MicroRNA profiling of exosomes isolated from different cancer cell line conditional media and plasma, saliva and serum of NSCLC, breast and oral carcinoma patients, for biomarkers discovery in a liquid biopsies scenario.
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- Date **2014**
 - Institution name University "la Sapienza" of Rome in collaboration with University of Palermo
 - Sector Scientific research
 - Position PON grant winner
 - Main tasks Role of exosomes isolated from cardiomyocytes in heart muscle regeneration mediated by CSCs.
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- Date **FROM JULY 2012 TO OCTOBER 2013**
 - Institution name University of Palermo, Biopathology and Medical Biotechnology Department
 - Sector Scientific research
 - Position Trainee – Intern
 - Main tasks Cell cultures; Isolation and characterization of exosomes. Proteomic profile of MDX mice quadriceps undergoes low intensity aerobic exercise. Technical support and maintenance of the laboratory activities.
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- Date **From April 2012 to June 2012**
 - Institution name Istituto Zooprofilattico Sperimentale della Sicilia "A. Mirri", Via G.Marinuzzi n.3, Palermo.
 - Sector Scientific research
 - Position Trainee – Intern
 - Main tasks Cell Cultures, isolation and differentiation of Mesenchimal Stem Cells from horse visceral and subcutaneous adipose tissue. MSCs characterization by CFU and stem gene expression. MSCs differentiation in osteocytes, chondrocytes and adipocytes.
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- Date **FROM OCTOBER 2010 TO FEBRUARY 2011**
 - Institution name University of Palermo, Biopathology and Medical Biotechnology Department
 - Sector Scientific research
 - Position Trainee – Intern
 - Main tasks Molecular biology; DNA recombinant technology; genetic engineering. Expression and purification of GST-STRIM fusion protein.

FORMATION

- Date Da Ottobre 2011 a Ottobre 2013
- Institution name University of Palermo
 - Main tasks Biochemistry; proteomics; cellular and epigenomic biotechnology; biotechnology in medical oncology; molecular neurobiology; biotechnology diagnostics.
 - Qualification Master degree in Medical Biotechnologies and Molecular Medicine (LM-9), 109/110

- Date Da Ottobre 2007 a Febbraio 2011
- Institution name University of Palermo
 - Main tasks Molecular Biology, Cell Biology, Microbiology, Mathematics, Physics, Chemistry, Informatics, DNA recombinant technologies; general and molecular genetics; applied biology, cellular biotechnology in stem cells; biotechnology in medical oncology.
 - Qualification Bachelor Degree in Biomedical Biotechnologies, 102/110

- Date March 2014
- Institution name University of Palermo
- Qualification Italian Biologist Licence (AA_070794)

- Date 2014
- Institution name University of Palermo
- Qualification License for animal experimentation *in vivo*

- Date 2015
- Institution name University of Palermo
- Qualification Enabling biological samples and enabling "Full-Basic Life Support Defibrillator"

PERSONAL SKILLS

NATIVE LANGUAGE

ITALIAN

OTHER LANGUAGES

	Comprehension		Verbal		Writing
	Hearing	Reading	Interaction	Production	Production
English	B2	B2	B2	B2	B1
French	A2	B1	A2	A2	A2

SOCIAL SKILLS

Good relational capacity as a result of several years of charity and volunteering activities. Great Speaker/Lecturer skills as a result of political and academic activity.

MANAGEMENT SKILLS

Good Planning and Problem Solving skills due to several international exchange experience with other bodies of environmental emergency management. Great risk/response evaluation skill due to a long experience as Forest Patrolman.

TECHNICAL SKILLS

Genetic Engineering - Electrophoresis Techniques (Agarose, SDS-PAGE, Bidimensional) - RNA / DNA / Protein extraction and quantization - Cell Cultures - MTT assay, Angiogenesis assay, Colony formation assay, Invasion assay, Proliferation assay - ELISAs - Western-Blot - PCRs (Classic, Real Time, Colony) - Mass Spectrometry (MALDI-TOF/ TOF); Spectrophotometer - Comparative Bio-informatic Analysis (Image Master 2D Platinum) – Analysis of exosomes isolated from plasma, serum and cell cultures - Laboratory mice manipulation and up keeping for *in vivo* studies - Laboratory Management, Maintenance - Autoclaves, centrifuges, ultracentrifuges - Chemicals preparations

OTHER SKILLS

European Computer Driving Licence (ECDL) (Word, Internet, Excel, Access, PowerPoint) - Photo Editor - Biomedical Databases - Bioinformatics Tools - Community Rescuer + BLS license - Cambridge Academy B2.2 Certificate - Forest Patrolman for the Sicilian Region, Great interest in motoring engineering, swimming and fitness.

DRIVING LICENCES

A3 (motorbike) / B (car)

Publications

Papers:

1. **Exosomal shuttling of miR-126 in endothelial cells modulates adhesive and migratory abilities of chronic myelogenous leukemia cells.** Taverna et al. *Molecular Cancer*. 2014; 13:169. doi:10.1186/1476-4598-13-169. (IF 4.257)
2. **Curcumin inhibits in vitro and in vivo chronic myelogenous leukemia cells growth: a possible role for exosomal disposal of miR-21.** Taverna S, Giallombardo M. et al. *Oncotarget*. 2015; 6:21918–21933. doi: 10.18632/oncotarget.4204. (IF 5.008)
3. **Curcumin modulates chronic myelogenous leukemia exosomes composition and affects angiogenic phenotype via exosomal miR-21.** Taverna, et al. *Oncotarget*. 2016; 7(21), 30420-30439. doi: 10.18632/oncotarget.8483. (IF 5.008)
4. **Exosome-mediated drug resistance in cancer: the near future is here.** Marco Giallombardo, Simona Taverna, Riccardo Alessandro, David Hong and Christian Rolfo. *Therapeutic Advances in Medical Oncology*. 2015, In press (I.F. 2.827)
5. **Exosomal miRNA analysis in non-small cell lung cancer (NSCLC) patients' plasma through qPCR: a feasible liquid biopsy tool.** Giallombardo M. et al. 2015. Jove article. 2016 In press (I.F. 1.325)
6. **Exosomes isolation and characterization in serum is feasible in Non-Small Cell Lung Cancer patients: critical analysis of evidence and potential role in clinical practice.** Taverna S* & Giallombardo M.* , Gil-Bazo I, Carreca AP, Castiglia M, Chacártegui J, Araujo A, Alessandro R, Pauwels P, Peeters M, Rolfo C. *Oncotarget*. 2016 Feb 23. doi: 10.18632/oncotarget.7638. (IF 5.008)
7. **Looking in the garden of the hesperides: new drugs in hepato-cellular carcinoma.** Castañón Alvarez E, Giallombardo M, Gil-Bazo I, Papadimitriou K, Pauwels P, Peeters M, Rolfo C. *Minerva Chir*. 2015 Apr;70(2):119-29. Epub 2015 Jan 23. Review. (IF 0.707)
8. **Nintedanib in Non-Small Cell Lung Cancer (NSCLC): from the preclinical to the approval** C.Caglevic, M. Grassi , L. Raez, A. Listi, M. Giallombardo , E.Bustamante, I. Gil-Bazo, C. Rolfo. *Ther Adv Respir Dis*. 2015 Aug;9(4):164-72. doi: 10.1177/1753465815579608. Epub 2015 Apr 7. Review. (I.F. 1.949)
9. **Reduction of mdx mouse muscle degeneration by low-intensity endurance exercise: a proteomic analysis in quadriceps muscle of exercised versus sedentary mdx mice.** Fontana S, Schillaci O, Frinchi M, Giallombardo M, Morici G, Di Liberto V, Alessandro R, De Leo G, Perciavalle V, Belluardo N, Mudo' G. *Biosci Rep*. 2015 May 12;35(3). pii: e00213. doi: 10.1042/BSR20150013. (I.F. 2.637)
10. **Entrectinib, a potent new TRK, ROS1, and ALK inhibitor: new therapeutic opportunity not only for Non-Small Cell Lung Cancer.** Rolfo C, Ruiz R, Giovannetti E, Gil-Bazo I, Russo A, Passiglia F, Giallombardo M, Peeters M, Raez L. *Expert Opin Investig Drugs*. 2015;24(11):1493-500. doi: 10.1517/13543784.2015.1096344. Epub 2015 Oct 12. (I.F. 5.528)
11. **The potential of neurotrophic tyrosine kinase (NTRK) inhibitors for treating lung cancer.** Passiglia F, Caparica R, Giovannetti E, Giallombardo M, Listi A, Diana P, Cirrincione G, Caglevic C, Raez LE, Russo A, Rolfo C. *Expert Opin Investig Drugs*. 2016 Apr;25(4):385-92. doi: 10.1517/13543784.2016.1152261. Epub 2016 Feb 24. (I.F. 5.528)
12. **BRAF mutations in non-small cell lung cancer: is finally Janus opened the door?** Rafael Caparica, Gilberto de Castro Jr, Ignacio Gil-Bazo, Christian Caglevic, Raffaele Calogero, Marco Giallombardo, Edgardo S. Santos, Luis E. Raez & Christian Rolfo. *Crit Rev Oncol Hematol*. 2016 May;101:32-9. doi: 10.1016/j.critrevonc.2016.02.012. Epub 2016 Feb 27. Review. (I.F. 4.027)
13. **In silico pathway analysis in cervical carcinoma reveals potential new targets for treatment.** van Dam PA, van Dam PJ, Rolfo C, Giallombardo M, van Berckelaer C, Trinh XB, Altintas S, Huizing M, Papadimitriou K, Tjalma WA, van Laere S. *Oncotarget*. 2016 Jan 19;7(3):2780-95. doi: 10.18632/oncotarget.6667. (IF 5.008)
14. **Exosomes in lung cancer liquid biopsies: two sides of the same coin?** Christian Rolfo, Marco Giallombardo, et al. *Lung Cancer*. 2016 Nov 18. pii: S0169-5002(16)30530-X. doi: 10.1016/j.lungcan.2016.11.014. (I.F. 3.767)
15. **Exosomes genetic cargo in lung cancer: a truly Pandora's box.** Pablo Reclusa, Rafael Sirera, Antonio Araujo, Marco Giallombardo, Anna Valentino, Laure Sorber, Ignacio Gil Bazo, Patrick Pauwels, Christian Rolfo. *Translational Lung Cancer Research*. 2016. Oct;5(5):483-491
16. **Second Line Treatment of Non-Small Cell Lung Cancer: Clinical, Pathological and Molecular Aspects of Novel Promising Drugs.** Luis Corrales, Amanda Nogueira, Francesco Passiglia, Angela Listi, Christian Caglevic, Marco Giallombardo, Luis Raez, Edgardo Santos, Christian Rolfo *Journal: Frontiers in Medicine, section Pathology*. Under review.
17. **Exosomes Biology: Function and Clinical Implications in Lung Cancer.** Martin Frederik Dietrich*, Christian Rolfo*, Pablo Reclusa, Marco Giallombardo, Anna Valentino, Luis Estuardo Raez. *Cancer Translational Medicine - special issue on Liquid Biopsy*. Submitted

18. **Exosomal microRNAs in liquid biopsies: future biomarkers for prostate cancer.** Anna Valentino*, Pablo Reclusa*, Rafael Sirera, Marco Giallombardo, Carlos Camps, Patrick Pauwels, Stefania Crispi, Christian Rolfo. *Clinical and Translational Oncology* (IF 2.0175). 2017 Jan 4. doi: 10.1007/s12094-016-1599-5.
19. **Amphiregulin contained in NSCLC-exosomes induces osteoclast differentiation through the activation of EGFR pathway.** Simona Taverna* , Marzia Pucci*, Marco Giallombardo, Maria Antonietta Di Bella, Maria Carmela Santarpia, Pablo Reclusa, Ignacio Gil-Bazo, Christian Rolfo and Riccardo Alessandro. **Oncogene.** (I.F. 7.932) Submitted.

Acts in congresses:

1. **Can curcumin induces selective packaging of miRNAs in exosomes? A pilot study in chronic myelogenous leukemia cells.** Christian Diego Rolfo, Simona Taverna, **Marco Giallombardo** , Mariano Provencio, Jorge Chacartegui, Marc Peeters, Patrick Pauwels, Riccardo Alessandro *J Clin Oncol* 33, 2015 (suppl; abstr e13563) ASCO meeting 2015, Chicago. (I.F. 20.98)
2. **Exosomes isolation and characterization in non-small cell lung carcinoma patients: Proof of concept study.** Christian D. Rolfo, **Marco Giallombardo** , Marta Castiglia, Jorge Jorge Chacartegui, Mariano Provencio, Riccardo Alessandro, Anna Paola Carreca, Pilar Roca, Jordi Oliver, Isabel Bover, Jan P. Van Meerbeeck, Antonio Russo, Marc Peeters, Patrick Pauwels. *J Clin Oncol* 33, 2015 (suppl; abstr 11101) , ASCO meeting 2015, Chicago. (I.F. 20.98)
3. **Exosomes analysis in Non-Small Cell Lung Cancer (NSCLC): looking for clinical application.** Christian Rolfo, Marta Castiglia, **Marco Giallombardo** et al. AACR 106th Annual Meeting 2015; April 18-22, 2015; Philadelphia, PA. doi: 10.1158/1538-7445.AM2015-3382 *Cancer Res* August 1, 2015 75; 3382.
4. **Exosomal miRNA analysis in Non-Small Cell Lung Cancer: new liquid biopsy biomarker?** Marta Castiglia, Anna P. Carreca, Marco Giallombardo, Jorge Chacartegui Borrás, Nele Van Der Steen, Inge Mertens, Marc Peeters, Antonio Russo, Patrick Pauwels & Christian Rolfo. AACR 106th Annual Meeting 2015. April 18-22, 2015; Philadelphia.
5. **Exosomal MiRNA Analysis of Non-Small Cell Lung Cancer (NSCLC) Liquid Biopsies. Mirror of the Disease Status?: Proof of Concept Study.** **M. Giallombardo** , J. Chacartegui, L. Sober, J.P. Van Meerbeeck, S. Goethals, R. Alessandro, P. Pauwels, C. Rolfo P2.04-094 Abstract – WCLC IASLC Sept. 2015- Denver (CO). USA
6. **Follow up analysis by exosomal miRNAs in EGFR Mutated non-small cell lung cancer (NSCLC) patients during Osimertinib (AZD9291) treatment: a potential prognostic biomarker tool.** **Marco Giallombardo***, Jorge Chacartegui Borrás*, Pablo Reclusa, Jan P. Van Meerbeeck, Riccardo Alessandro, Marc Peeters, Patrick Pauwels & Christian Rolfo. ASCO Meeting 2016. *J Clin Oncol* 34, 2016 (suppl; abstr e23035).
7. **Erlotinib Induce miRNA Alterations in T790M EGFR Mutated NSCLC: Preclinical Study.** J. Chacartegui, **M. Giallombardo** , N. Van Der Steen, P. Pauwels, C. Rolfo P2.04-027 Abstract – WCLC IASLC Sept. 2015- Denver (CO). USA
8. **Curcumin induces selective packaging of miR-21 in exosomes released by chronic myelogenous leukemia cells.** Simona Taverna, **Marco Giallombardo**, Anna Flugy, Christian Rolfo, Marzia Pucci, Giacomo De Leo and Riccardo Alessandro. XII-EVs in Cancer – ISEV 2015. Abstract and Poster.
9. **Quadriceps muscle proteomic profiling of exercised versus sedentary mdx mice.** Frinchi, M., Fontana, S., **Giallombardo, M.**, Schillaci, O., Morici, G., Di Liberto, V., et al. (2014). Abstract - 65th SIF National Congress.
10. **Comparison of exosome and exosomal RNA isolation methods in NSCLC liquid biopsies. Assessment of hsa-miR-1228-3p as normalizer for exosomal microRNA analysis.** **Marco Giallombardo** , Jorge Chacartegui Borrás, Nele Van Der Steen, Simona Taverna, Nathalie Claes, Frederik Leroux, Sara Bals, Riccardo Alessandro, Marc Peeters, Patrick Pauwels & Christian Rolfo. Abstract, Poster and oral presentation – EORTC/PAMM Int. Congress, Antwerp, 2016.
11. **Exosomes isolated in plasma of non-small cell lung cancer patients contain microRNA related to the EGFR pathway: Proof of concept** C. Rolfo, J. Chacartegui, **M. Giallombardo** , R. Alessandro, M. Peeters. ELCC Meeting 2016. Under review.
12. **Exosomes in pathological conditions: new insights for biomarker development and therapeutic applications.** Pucci M., Taverna S., Corrado C., Giallombardo M., Rolfo C., Alessandro R. AICC, Roma 2016. Best Poster.
13. **Effetti degli esosomi rilasciati dalle cellule di carcinoma polmonare non a piccole cellule sul differenziamento degli osteoclasti.** Taverna S. et al. Abstract and Oral Presentation. AIBG Congress, Cagliari 2016.
14. **Curcumin modulates chronic myelogenous leukemia exosomes composition and affects angiogenic phenotype, via exosomal Mir-21.** Taverna S. et al. Abstract and poster. ITPA XI Annual congress of the

Italian Proteomics Association. Perugia 2016.

15. **Evaluation of different exosomal RNA isolation methods in NSCLC liquid biopsies. Exosomal hsa-miR-1228-3p a stable control for analysis?** Marco Giallombardo, Pablo Reclusa, Anna Valentino, Rafael Sirera, Patrick Pauwels, Christian Rolfo. IASLC-LALCA Panama 2016, abstract and poster accepted.
16. **Effects of exosomes released by NSCLC cells on osteoclasts differentiation.** Pucci M., Taverna S., Corrado C., **Giallombardo M.**, Rolfo C. and Alessandro R. Abstract e Poster – EORTC/PAMM Int. Congress, Antwerp, 2015.

Book chapters:

1. **The liquid biopsies: A new level of complexity in cancer regulation and a promising source of biomarkers.** Book: Molecular Targets and Strategies in Cancer Prevention. Christian Rolfo; Jorge Chacártegui Borrás; **Marco Giallombardo**. Springer EDITOR – 2016
2. **Technical aspects for the evaluation of Exosome and their content.** Book: Liquid Biopsy in Cancer Patients. Simona Fontana; **Marco Giallombardo**; Riccardo Alessandro. Springer EDITOR – 2016 Submitted.

Oral presentations:

1. **Comparison of exosome and exosomal RNA isolation methods in NSCLC liquid biopsies. Assessment of hsa-miR-1228-3p as normalizer for exosomal microRNA analysis.** EORTC/PAMM International Congress, Antwerp, 2016.
2. **Esosomi e microRNA circolanti: piccole molecole e microvescicole con un grande ruolo?** Congresso Congiunto delle Società Scientifiche Italiane di Chirurgia, Roma, 25-29/09/2016.

References:

Prof. Dr. Christian Rolfo, MD, PhD
Head of Phase I - Early Clinical Trials Unit
Director of Clinical Trial Management Program
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I approve the processing of my personal data in compliance with European and International Legislative Decrees.

Montemaggiore Belsito, 31/01/17

Signature
Dr. Marco Giallombardo

