



Anna Paola Carreca

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ESPERIENZA LAVORATIVA

[16/01/2018 – Attuale] **Scientist in Proteomics and Mass Spectrometry**

Fondazione Ri.MED

Indirizzo: Palermo, Italia

Città: Palermo

Paese: Italia

Principali attività e responsabilità:

Involved in several research projects carrying out activities such as: Proteomics based Mass Spectrometry; sample processing for MS analysis, label free, FASP, hiSPECS, TMT labelling, SILAC (Stable Isotope Labeling by Amino acids in Cell culture); Exosome isolations and characterization; Western Blot; Cell bank; Primary cells isolation and culture, confocal microscopy. Lab Managing.

[04/01/2016 – 31/12/2018] **Scholarship holder - Biologist**

Fondazione Ri.MED

Città: Palermo

Paese: Italia

Principali attività e responsabilità:

Scholarship holder in Proteomics and Mass Spectrometry.

Proteomics, sample preparation for mass spectrometry analysis, TMT labelling, Primary cells isolation and culture in SILAC (Stable Isotope Labeling by Amino acids in Cell culture).

[03/11/2014 – 30/11/2015] **Scholarship holder-Biologist**

Fondazione Ri.MED

Indirizzo: Palermo, Italia

Principali attività e responsabilità:

Scholarship Holder in LPP Diabetes - Study of cytoprotective small molecules to be used in Alzheimer's disease and in the treatment of diabetes by pancreatic islet transplantation (Project code: PON02_00607_3421644).

[26/05/2014 – 29/10/2014] **Research assistant**

UZA- Antwerp University Hospital, Belgium

Indirizzo: Anversa, Belgio

Principali attività e responsabilità:

SKILLS ACQUIRED: Exosome isolation and characterization, Nanosight technology for Nanoparticle Tracking Analysis, Western Blot, Digital PCR assay.

[03/03/2014 – 23/05/2014] **Biologist - Postgraduate internship**

A.O.U.P Paolo Giaccone- Università degli Studi di Palermo

Indirizzo: Palermo, Italia

Principali attività e responsabilità:

Postgraduate internship : Medical Oncology , Molecular Biology

[05/06/2012 – 05/12/2012] **Biologist - Postgraduate internship**

ISMETT (Istituto Mediterraneo per i Trapianti e Terapie ad Alta Specializzazione)

Indirizzo: Palermo, Italia

Principali attività e responsabilità:

Postgraduate internship : Cell Culture, Molecular Biology

[10/03/2011 – 05/08/2011] **Master Thesys and training**

University of Crete - School of Medicine

Indirizzo: Heraklion-Crete, Grecia

Principali attività e responsabilità:

Master Thesys: Cell culture; Viral propagation; Confocal and fluorescence microscopy;
MTT assay; Wound Healing assay

[01/04/2010 – 30/09/2010] **Training**

Istituto Telethon Dulbecco – Laboratorio di Epigenetica Molecolare

Indirizzo: Palermo, Italia

Principali attività e responsabilità:

Confocal and fluorescence microscopy; Microdissection of Drosophila m. larvae; PCR; Enzymatic digestion; Cloning Techniques; Primer engineering; Electrophoresis on agarose gel; DNA extraction by gel and bacteria.

ISTRUZIONE E FORMAZIONE

[01/11/2019 – 30/11/2019] **Visiting researcher**

DZNE- Neuroproteomics Department

Indirizzo: München , Germania

[01/2012] **Abilitation for Biologist**

University of Palermo- ONB (Ordine Nazionale dei Biologi)

Indirizzo: Palermo, Italia

[10/2009 – 10/2011] **Master degree in Medical Biotechnologies and Molecular Medicine**

Università degli Studi di Palermo

Indirizzo: Palermo, Italia

Classificazione nazionale: 110/110 e lode

Principali materie studiate/competenze professionali acquisite.:

Cellular and molecular biotechnology; Molecular Genetics; Biotechnologies in Medical Oncology; Cell and Molecular target of Hepatic and Gastrointestinal Disease; Molecular Pathology of Infection Disease; Protein and RNA protein interaction; Cellular Biochemistry.

[09/2001 – 07/2009] **Bachelor Degree in Biotechnology – Special Curriculum in Medical Biotechnology**

Università degli Studi di Palermo

Indirizzo: Palermo, Italia

Classificazione nazionale: 102/110

Principali materie studiate/competenze professionali acquisite.:

Cellular Biotechnologies and cell culture; Molecular Biotech.; Genetic and Molecular Genetics; Virology; Microbiology; Biochemistry.

[12/1999] **Preliminary English Test**

International House Palermo & University of Cambridge (ESOL Examination)

Indirizzo: Palermo, Italia

Classificazione nazionale: Livello intermedio B1 nel QCER.

**COMPETENZE
LINGUISTICHE**

Lingua madre: italiano

Altre lingue:

inglese

ASCOLTO C1 LETTURA C1 SCRITTURA C1

PRODUZIONE ORALE C1 INTERAZIONE ORALE C1

PUBBLICAZIONI

Pubblicazioni

- **Carreca, A.P.; et al. Galectin-9 and Interferon-Gamma Are Released by Natural Killer Cells upon Activation with Interferon-Alpha and Orchestrate the Suppression of Hepatitis C Virus Infection.** *Viruses* **2022**, *14*, 1538. <https://doi.org/10.3390/v14071538> IF: 5.818
- Yang, C.-Y., et al. Quantitative Proteomics Reveals That ADAM15 Can Have Proteolytic-Independent Functions in the Steady State. *Membranes* **2022**, *12*, 578. <https://doi.org/10.3390/membranes12060578> IF: 4.562
- G. Di Mento, et al. “A retrospective molecular epidemiological scenario of carbapenemase-producing *Klebsiella pneumoniae* clinical isolates in a Sicilian transplantation hospital shows a swift polyclonal divergence among sequence types, resistome and virulome”. *Microbiological Research*, Volume 256, 2022, 126959, ISSN 0944-5013, <https://doi.org/10.1016/j.micres.2021.126959> IF: 5.415
- Bulati M, et al. ***Klebsiella pneumoniae* Lipopolysaccharides Serotype O2afg Induce Poor Inflammatory Immune Responses Ex Vivo.** *Microorganisms*. 2021 Jun 17;9(6): 1317. doi: 10.3390/microorganisms9061317. I.F. 4.128
- **Carreca, A.P.; et al. Quantitative Proteomics Reveals Changes Induced by TIMP-3 on Cell Membrane Composition and Novel Metalloprotease Substrates.** *Int.J. Mol.Sci.* **2021**, *22*, 2392. <https://doi.org/10.3390/ijms22052392> I.F. 4.556
- Chinnici, C.M.; et al. **Extracellular Vesicle-Derived microRNAs of Human Wharton’s Jelly Mesenchymal Stromal Cells May Activate Endogenous VEGF-A to Promote Angiogenesis.** *Int. J. Mol. Sci.* **2021**, *22*, 2045. <https://doi.org/10.3390/ijms22042045>; I.F.4.556
- **Carreca, A.P., et al. TIMP-3 facilitates binding of target metalloproteinases to the endocytic receptor LRP-1 and promotes scavenging of MMP-1.** *Sci Rep* **10**, 12067 (2020). <https://doi.org/10.1038/s41598-020-69008-9> I.F. 3.998

- Gaetani M, Chinnici CM, Carreca AP, Conaldi PG. "Unbiased and quantitative proteomics reveals highly increased angiogenesis induction by the secretome of mesenchymal stromal cells isolated from fetal rather than adult skin." J Tissue Eng Regen Med. 2017 Jan 19; I. F. 4.71.
- Taverna S, et al. 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. Oncotarget. 2016 May 10;7(19):28748-60. doi: 10.18632/oncotarget.7638. PMID: 26919248; PMCID: PMC5053760.
- K. Shahanavaj, et al. Cancer and the microbiome: potential applications as new tumor biomarker, Expert Review of Anticancer Therapy, 15:3, 317-330, DOI: 10.1586/14737140.2015.992785, Impact Factor: 2.094
- Rolfo C., et al. "Liquid biopsies in lung cancer: The new ambrosia of researchers" [Biochem. Biophys. Act. 1846(2014) 539–546] Biochimica et Biophysica Acta (BBA) - Reviews on Cancer, Volume 1855, Issue 1, January 2015, Pages 17 Impact Factor: 7.841
- Onorati MC, et al. "The ISWI Chromatin Remodeler Organizes the hsr ω ncRNA-Containing OmegaSpeckle Nuclear Compartments." PLoS Genet 7(5): (2011)e1002096. doi:10.1371/journal.pgen.1002096 Impact Factor: 8.694

PATENTE DI GUIDA

Motocicletta: AM

Motocicletta: A

Automobile: B

CONFERENZE E SEMINARI

Seminari

"EMBL Course - Quantitative Proteomics: Strategies and Tools to Probe Biology"; Heidelberg (19-23 Jun 2017)

"Bridging health and economic development through public-private partnerships"; Ri.MED Symposium; 17 Ottobre 2016 Palermo.

"XXXII LIAC Meeting on Vascular Research"; 14-17 Settembre 2016; Ustica.

"FROM PERSONALIZED MEDICINE TO BIG DATA"; Ri.MED Symposium; 26 e 27 Ottobre 2015 ; Roma

"5th International Conference on "Proteomics & Bioinformatics"; September 01-03, 2015 in Valencia, Spain

RAS MASTER PROGRAM- AMGEN; 22 MARZO 2014 FIRENZE

"147° Course Geriatric Oncology 2013- A postgraduate Course"- International School of Medicine Sciences- April 20th/22nd 2013 -Ettore Majorana Centre; Erice (TP).

"Innovation and efficiency in microbiology lab" – BD and ISMETT- 24 Maggio 2012- CNR Palermo.

"145° Course of Oncogeriatry 2012 – A postgraduate Course on Geriatric Oncology 2012"- International School of Medicine Sciences- April 27th/29th 2012 -Ettore Majorana Centre; Erice (TP).

XXX Meeting of the Italian Society for the study of Connective Tissues (SISC) 27-29 October, 2010 Palermo

5th International summer school on advanced biotechnology - 31t August - 4 September , 2010 S.Margherita del Belice (Ag).

Breast and Lung Cancer in the elderly – Update and Future; 29 June – 1 July, 2010 International School of Medicine Sciences -Ettore Majorana Centre; Erice (TP).

Cancer Stem Cell: current controversies- University of Palermo- Prof. Adamo 16 March, 2010.

COMPETENZE COMUNICATIVE E INTERPERSONALI

Competenze comunicative e interpersonali.

Excellent organizational skills and relational thanks to 'Erasmus experience at the University of Crete, where, working on my thesis, I had the opportunity to meet different cultures and people from all over the world.

I have also participated in various sports competitions, individual and not, such as regional swimming competitions in Sicily. I have practiced for many years gymnastics and was part of a theater group with which we have represented the Greek tragedies around Sicily.

I have traveled in the U.S. participating in international conferences such as AACR 2003 in Washington, and the ASCO 2004 in New Orleans. Since 2001 I have a friendly collaboration with the Scientific Centre "Ettore Majorana" in Erice as assistant organizer of international conferences. From 2004 to 2007 I worked with the Committee Addio Pizzo to raise awareness of children in schools and awareness of citizens and shopkeepers to critical consumption. I am a member supporter of the 'National Association of State Police and voluntary for Civil Protection.

COMPETENZE PROFESSIONALI

Competenze professionali

Able to work independently and to process protein samples for LC-MS/MS analysis with SILAC, TMT and free labelling conditions, in solution and in gel digestion methods .

Primary human cell cultures and Bacteria culture. Exosomes isolations and good ability to use Fluorescence and Confocal microscopes; other techniques of Molecular Biology and Laboratory: PCR, RT-PCR, DNA and RNA extraction, cloning techniques, gel electrophoresis agarose, Western Blot, ELISA assay, design primers, Wound Healing Assay, MTT assay, micro-dissection of larvae of D. melanogaster, D. Melanogaster cultures .

ABSTRACTS AND POSTERS

Abstracts and Posters

Abstracts:

- N. van der Steen; K. Zwaenepoel, C. Rolfo, E. Giovannetti, M. Castiglia, V. Deschoolmeester, A.P. Carreca, P. Germonpre, P. Pauwels- The influence of different cMET and EGFR backgrounds on the cytotoxicity of cMET and EGFR small molecule inhibitors in vitro . ENA 2014 (A.CR -EORTC -NCI), At Barcelona, Volume: Abstract 200 Impact Factor: 5.42 DOI: 10.1016/S0959-8049(14)70326-0
- G. BRONTE, F. BELLOMO, M.BURGIO, A.P.CARRECA, D.PIAZZA, S. RIZZO, et al. (2007). FULVESTRANT AND CAPECITABINE IN ELDERLY ADVANCED BREAST CANCER PATIENTS: THE PROPOSAL FOR AN EFFECTIVE AND SAFE COMBINED TREATMENT SCHEDULE.. In Annals of Oncology (pp.49-49) ISBN/ISSN: 0923-7534.
- M. BURGIO, F. BELLOMO, G. BRONTE, A.P. CARRECA, D. PIAZZA, S. RIZZO, et al. (2007). SAFETY AND EFFICACY OF INHALED IL-2 THERAPY IN PRE-TREATED BREAST CANCER ELDERLY PATIENTS WITH PULMONARY METASTASES.. In Annals of Oncology (pp.47-47) ISBN/ISSN: 0923-7534.
- CARRECA I, F. BELLOMO, G. BRONTE, D. PIAZZA, S. RIZZO, S. RUSSO, et al. (2006). Antiangiogenic scheduling of lower dose chemotherapy in elderly patients with advanced colorectal cancer. Paper presented at First AACR International Conference on Molecular Diagnostics in Cancer Therapeutic Development, Chicago, IL. September 12-15, 2006, p. 137-138

- CARRECA I, D. PIAZZA, M. BURGIO, A.P. CARRECA, S. RUSSO, S. RIZZO, et al. (2005). VEGF levels could affect outcomes in elderly breast cancer women. Paper presented at 96th Annual Meeting American Association for Cancer Research, Anaheim, California. , April 16-20, 2005, vol. 46, p. 587-588
- CARRECA I, S. RIZZO, G. BRONTE, M. BURGIO, S. FIORINO, G. MAGGIO, et al. (2005). Capecitabine (XEL) + Oxaliplatin (OX) in elderly people (EP) with Colorectal Cancer (CRC): Comparison of safety (S) and feasibility (F) of two different schedules. Preliminary findings. In European Journal of Cancer Supplements (Paris, France, 30 October - 3 November, 2005, vol. 3, No. 2, pp.373-373).

Posters:

- Mertens, M. Castiglia, A.P. Carreca, G. Baggertman, M. Peeters, P. Pauwels, C. Rolfo
- Exosome analysis in cancer patients: From the preclinical towards the clinical application: Trial design - doi:[10.1016/S0959-8049\(14\)70416-2](https://doi.org/10.1016/S0959-8049(14)70416-2)
- N. van der Steen, K. van der Steen, K. Zwaenepoel; E. Giovannetti; M. Castiglia; A.P. Carreca ;P. Pauwels; C. Rolfo. - Can a link between the EGFR and cMET pathway in non-small cell lung cancer explain resistance against targeted therapies and open new therapeutic opportunities? doi:[10.1016/S0959-8049\(14\)70473-3](https://doi.org/10.1016/S0959-8049(14)70473-3)

PRESENTAZIONI ORALI

Presentazioni

Oral presentation at XXXII LIAC Meeting, Ustica, 14-17 september 2016

Abstract: Quantitative Proteomics as a Valuable Tool for Comparing Angiogenic Potential between Different Cell Products .

Il sottoscritto è a conoscenza che, ai sensi dell'art. 26 della legge 15/68, nonché degli artt. 46 e 47 del D.P.R. 445/2000, le dichiarazioni mendaci, la falsità negli atti e l'uso di atti falsi sono puniti ai sensi del codice penale e delle leggi speciali. Inoltre, il sottoscritto autorizza al trattamento dei dati personali, secondo quanto previsto dalla Legge 675/96 del 31 dicembre 1996. Autorizzo il trattamento dei miei dati personali presenti nel CV ai sensi dell'art. 13 d. lgs. 30 giugno 2003 n. 196 - "Codice in materia di protezione dei dati personali" e dell'art. 13 GDPR 679/16 - "Regolamento europeo sulla protezione dei dati personali".

Data

28-03-2023 Palermo

Firma

Anna Paola Carreca

