

**DICHIARAZIONE SOSTITUTIVA DI ATTO DI NOTORIETA' E DICHIARAZIONE
SOSTITUTIVA DI CERTIFICAZIONI**

Art. 19 e 47 del DPR 445 del 28/12/2000
Art.46 del DPR 445 del 28/12/2000

La sottoscritta **SARA CARPI**

consapevole delle responsabilità penali previste dagli art.75 e 76 del DPR 445/2000 per le ipotesi di falsità in atti e dichiarazioni mendaci

DICHIARA

che il curriculum scientifico professionale presentato contiene informazioni veritiera, e che i titoli e premi dichiarati risultano realmente posseduti.

Data
25.08.2020

la Dichiara

Esente da autentica di firma ed esente da imposta di bollo.

Curriculum Vitae et studiorum of Sara Carpi

PERSONAL DETAILS

Birth date and place:

Nationality: Italian

Office Address:

Personal Address:

e-mail:

Tell: +

EDUCATION

Feb 2015 Ph.D. in Medical Pathophysiology and Pharmacology (PhD Program: "Clinical Pathophysiology and Medical Science") with the thesis "New Pharmacological Strategies For Cutaneous Malignant Melanoma", Department of Pharmacy, University of Pisa (Italy).

Dec 2009 State Examination for Professional Qualification.

Oct 2009 Degree in Chemistry and Pharmaceutical Technologies (CTF). Thesis title: "Production and Evaluation of Catalytic Activity of a Recombinant Antibody Fragment" Department of Psychiatry, Neurobiology, Pharmacology and Biotechnology, University of Pisa (Italy).

MATERNITY LEAVE

Nov 2012 - April 2013 maternity leave

Apr 2018 - Nov 2018 maternity leave

WORK EXPERIENCE

- Apr 2017 - Sep 2020 **Researcher** (RTDa) in Pharmacology (BIO/14), Department of Pharmacy, University of Pisa, Italy
- June 2017- Jen 2018 Fellowship SIF (Società Italiana di Farmacologia) for the project "Evaluation of the combination of immune checkpoint inhibitors with oncolytic vaccines in cutaneous melanoma models", ImmunoViroTherapy Lab, Department of Pharmacy, University of Helsinki, Finland, Professor Vincenzo Cerullo
- Apr 2016 - Mar 2017 Post-doctorate in the Molecular Pharmacology Laboratory at the University of Pisa, Supervisor: Professor Paola Nieri
- Jun 2016 - Sep 2016 **EMBO** (European Molecular Biology Organization) short-term fellowship in the ImmunoViroTherapy Lab at the Department of Pharmacy, University of Helsinki, Finland. Supervisors: Professor Vincenzo Cerullo
- Apr 2015 - Mar 2016 Fellowship MSD (Merck & Co.) - SIF (Società Italiana di Farmacologia) Italy for the project "Role of the endocannabinoid system in human melanoma stem-like cells" Laboratory of Molecular Pharmacology, Department of Pharmacy, University of Pisa, Pisa and Laboratory of Tumor Cell Biology, Core Research Laboratory—Istituto Toscano Tumori (CRL-ITT), Florence, Italy
- Apr 2011- Dec 2011 Fellowship in the Nanocell Project (optical nanocarriers inside the cells) in the Molecular Pharmacology Laboratory, Department of Psychiatry, Neurobiology, Pharmacology and Biotechnology, University of Pisa.
- Oct 2010 - Mar 2011 Training in the Laboratory of Neurochemistry, IRCCS Fondazione Stella Maris, Pisa.

TEACHING ACTIVITY

- 2019-2020 Pharmacognosy (code 398EE) (38 hs frontal lessons and 45 hs laboratory)
<https://unimap.unipi.it/registri/dettregistriNEW.php?re=3299229::::&ri=013453>
- 2018-2019 Pharmacognosy (code 398EE) (35 hs frontal lessons and 60 hs laboratory)
<https://unimap.unipi.it/registri/dettregistriNEW.php?re=3288831::::&ri=013453>
- 2017-2018 Pharmacognosy (code 398EE) (14 hs frontal lessons)
<https://unimap.unipi.it/registri/dettregistriNEW.php?re=2086431::::&ri=013453>
- 2015-2016 Lesson about "Emerging techniques in Pharmacological Biotechnology" (4 hs)
<https://unimap.unipi.it/registri/dettregistriNEW.php?re=175969::::&ri=013453>
- Apr 2011-present Tutorial activities for thesis in *Pharmacy, Chemistry and Pharmaceutical Technology, Human Nutrition Sciences and Biotechnology* (Silvia Sabatino, Beatrice Polini, Alessandra Ferrari, Sara Barbani, Leandro Olivelli, Sara Cortese, Martinelli Michele, Cerri Lidia, Paola Garofalo, Rosy Distefano, Sofia Sordi, Federica Bertolotti, Nicolò Scaglione, Anna Corotti, Giulia Prestipino)



AWARDS

- Jan 2020 "EVOO Research's Got Talent 2020" Bari, Italy. Selected as one of the 35 best researchers in field of EVOO innovation.
- Jun 2017 Travel AWARD for Abroad by SIF (Italian Pharmacology Society) for the project "Evaluation of oncolytic vaccines and immune checkpoint inhibitors *in vivo* model of cutaneous melanoma"
- Ago 2016 EMBO short-term fellowship for the project "Evaluation of the combination of immune checkpoint inhibitors with oncolytic vaccines in cutaneous melanoma models"
- Jun 2014 Global Biotechnology Congress 2014 Award for Best Poster (Boston, MA, USA).

MAIN SCIENTIFIC PUBLICATIONS in Peer-review journals (2014-PRESENT)

Total number of publications = 27, HI = 11, Total citations = 269 (Scopus)

N. of publications as first/co-first author = 13

N. of publications as corresponding author = 9

N. of publications as second author = 6

ORCID iD: <https://orcid.org/0000-0002-3291-9009>

Scopus Author ID: 56245641100

Loop profile: 719778

1. Tumor suppressor role of hsa-miR-193a-3p and -5p in cutaneous melanoma. Polini B*, **Carpi S***, Doccini S, Citi V, Martelli A, Feola S, Santorelli FM, Cerullo V, Romanini A, Nieri P. International Journal of Molecular Sciences, accepted 24 august 2020 *These authors contributed equally to this work.
2. Expression Analysis of Muscle-Specific miRNAs in Plasma-Derived Extracellular Vesicles from Patients with Chronic Obstructive Pulmonary Disease. **Carpi S**, Polini B, Nieri D, Dubbini N, Celi A, Nieri P, Neri T. Diagnostics. 2020 10(7), 502. doi.org/10.3390/diagnostics10070502
3. The Citrus Flavonoid Naringenin Protects the Myocardium from Ageing-Dependent Dysfunction: Potential Role of SIRT1. Testai L, Piragine E, Piano I, Flori L, Da Pozzo E, Miragliotta V, Pirone A, Citi V, Di Cesare Mannelli L, Brogi S, **Carpi S**, Martelli A, Nieri P, Martini C, Ghelardini C, Gargini C, Calderone V. Oxid Med Cell Longev. 2020 Jan 25;2020:4650207. doi: 10.1155/2020/4650207. eCollection 2020.
4. The Extra-Virgin Olive Oil Polyphenols Oleocanthal and Oleacein Counteract Inflammation-Related Gene and miRNA Expression in Adipocytes by Attenuating NF-κB Activation. **Carpi S**, Scoditti E, Massaro M, Polini B, Manera C, D'Giacomo M, Esposito Salsano J, Poli G, Tuccinardi T, Doccini S, Santorelli FM, Carluccio MA, Macchia M, Wabitsch M, De Caterina R, Nieri P. Nutrients. 2019 Nov 21;11(12). pii: E2855. doi: 10.3390/nu11122855.
5. Circulating microRNAs as biomarkers for early diagnosis of cutaneous melanoma. **Carpi S**, Polini B, Fogli S, Podestà A, Ylösmäki E, Cerullo V, Romanini A, Nieri P. Expert Rev Mol Diagn. 2020 Jan;20(1):19-30. doi: 10.1080/14737159.2020.1696194. Epub 2019 Nov 27.
6. Harnessing therapeutic viruses as a delivery vehicle for RNA-based therapy. Ylösmäki L*, Polini B*, **Carpi S**, Martins B, Smertina E, Feola S, Fusciello M, Peltonen K, Nieri P,

Ylösmäki E, Cerullo V. PLoS One. 2019 Oct 23;14(10):e0224072. doi: 10.1371/journal.pone.0224072. eCollection 2019. *These authors contributed equally to this work.

7. Hydroxytyrosol Modulates Adipocyte Gene and miRNA Expression Under Inflammatory Condition. Scoditti E*, **Carpi S***, Massaro M, Pellegrino M, Polini B, Carluccio MA, Wabitsch M, Verri T, Nieri P, De Caterina R. Nutrients. 2019 Oct 17;11(10). pii: E2493. doi: 10.3390/nu1102493. *These authors contributed equally to this work.
8. Diclofenac-Derived Hybrids for Treatment of Actinic Keratosis and Squamous Cell Carcinoma. Tampucci S*, **Carpi S***, Digaocomo M, Polini B, Fogli S, Burgalassi S, Macchia M, Nieri P, Manera C, Monti D. Molecules. 2019 May 9;24(9). pii: E1793. doi: 10.3390/molecules24091793. *These authors contributed equally to this work.
9. Topical application of silymarin enhances cutaneous wound healing in rats. Tabari SA, **Carpi S**, Polini B, Nieri P, Esfahani ML, Moghadamnia AA, Ghorbani H, Ranaei M, Kazemi S. South African Journal of Botany. 2019 August, 124: 494-498.
10. Circulating cell-free microRNAs in cutaneous melanoma staging and recurrence or survival prognosis. Polini B*, **Carpi S***, Romanini A, Breschi MC, Nieri P, Podestà A. Pigment Cell Melanoma Res. 2018 Nov 27. doi: 10.1111/pcmr.12755. [Epub ahead of print] Review. *These authors contributed equally to this work.
11. Luteolin Prevents Cardiometabolic Alterations and Vascular Dysfunction in Mice With HFD-Induced Obesity. Gentile D, Fornai M, Pellegrini C, Colucci R, Benvenuti L, Duranti E, Masi S, **Carpi S**, Nieri P, Nericcio A, Garelli F, Virdis A, Pistelli L, Blandizzi C, Antonioli L. Front Pharmacol. 2018 Sep 25;9:1094. doi: 10.3389/fphar.2018.01094. eCollection 2018.
12. Oncolytic vaccines increase the response to PD-L1 blockade in immunogenic and poorly immunogenic tumors. Feola S, Capasso C, Fuciello M, Martins B, Tahtinen S, Medeot M, **Carpi S**, Frascaro F, Ylosmaki E, Peltonen K, Pastore L, Cerullo V. Oncoimmunology. 2018 May 7;7(8):e1457596. doi: 10.1080/2162402X.2018.1457596. eCollection 2018.
13. Olecanthal and oleacein contribute to the in vitro therapeutic potential of extra virgin oil- derived extracts in non-melanoma skin cancer. Polini B, Digaocomo M, **Carpi S**, Bertini S, Gado F, Saccomanni G, Macchia M, Nieri P, Manera C, Fogli S. Toxicol In Vitro. 2018 Oct;52:243-250. doi: 10.1016/j.tiv.2018.06.021. Epub 2018 Jun 28.
14. Anticancer Activity of Euplotin C, Isolated from the Marine Ciliate Euplotes crassus, Against Human Melanoma Cells. **Carpi S**, Polini B, Poli G, Alcantara Barata G, Fogli S, Romanini A, Tuccinardi T, Guella G, Frontini FP, Nieri P, Di Giuseppe G. Mar Drugs. 2018 May 16;16(5). pii: E166. doi: 10.3390/md16050166.
15. The flavonoid compound apigenin prevents colonic inflammation and motor dysfunctions associated with high fat diet-induced obesity. Gentile D, Fornai M, Colucci R, Pellegrini C, Tirotta E, Benvenuti L, Segnani C, Ippolito C, Duranti E, Virdis A, **Carpi S**, Nieri P, Németh ZH, Pistelli L, Bernardini N, Blandizzi C, Antonioli L. PLoS One. 2018 Apr 11;13(4):e0195502. doi: 10.1371/journal.pone.0195502. eCollection 2018.
16. Sucrosomial® iron absorption studied by in vitro and ex-vivo models. Fabiano A, Brilli E, Fogli S, Beconcini D, **Carpi S**, Tarantino G, Zambito Y. Eur J Pharm Sci. 2018 Jan 1;111:425-431. doi: 10.1016/j.ejps.2017.10.021. Epub 2017 Oct 18. PMID: 29055735.
17. Identification of plasma microRNAs as new potential biomarkers with high diagnostic power in human cutaneous melanoma. Fogli S*, Polini B*, **Carpi S**, Pardini B, Naccarati A, Dubbini N, Lanza M, Breschi MC, Romanini A, Nieri P. Tumour Biol. 2017 May;39(5):1010428317701646. doi: 10.1177/1010428317701646. PMID:28466785.

18. Cholinesterase-like organocatalysis by imidazole and imidazole-bearing molecules. Nieri P, **Carpi S**, Fogli S, Polini B, Breschi MC, Podestà A. *Sci Rep.* 2017 Apr 3;8:45760. doi: 10.1038/srep45760. PMID:28367983.
19. Tumor-promoting effects of cannabinoid receptor type 1 in human melanoma cells. **Carpi S**, Fogli S, Polini B, Montagnani V, Podestà A, Breschi MC, Romanini A, Stecca B, Nieri P. *Toxicol In Vitro.* 2017 Apr;40:272-279. doi: 10.1016/j.tiv.2017.01.018. Epub 2017 Jan 26. PMID:28131817.
20. Molecular beacon-decorated polymethylmethacrylate core-shell fluorescent nanoparticles for the detection of survivin mRNA in human cancer cells. Adinolfi B, Pellegrino M, Giannetti A, Tombelli S, Trono C, Sotgiu G, Varchi G, Ballestri M, Posati T, **Carpi S**, Nieri P*, Baldini F*. *Biosens Bioelectron.* 2017 Feb 15;88:15-24. doi: 10.1016/j.bios.2016.05.102. Epub 2016 Jun 1. PMID:27321444. *These authors contributed equally to this work.
21. Cytotoxic Activity of Olecanthal Isolated from Virgin Olive Oil on Human Melanoma Cells. Fogli S, Arena C, **Carpi S**, Polini B, Bertini S, Digiocomo M, Gado F, Saba A, Saccomanni G, Breschi MC, Nieri P, Manera C, Macchia M. *Nutr Cancer.* 2016 Jul;68(5):873-7. doi: 10.1080/01635581.2016.1180407. Epub 2016 Jun 7. PMID:27266366.
22. Analysis of the Antitumor Activity of Clotrimazole on A375 Human Melanoma Cells. Adinolfi B, **Carpi S**, Romanini A, Da Pozzo E, Castagna M, Costa B, Martini C, Olesen SP, Schmitt N, Breschi MC, Nieri P, Fogli S. *Anticancer Res.* 2015 Jul;35(7):3781-6. PMID:26124322.
23. AM251 induces apoptosis and G2/M cell cycle arrest in A375 human melanoma cells. **Carpi S**, Fogli S, Romanini A, Pellegrino M, Adinolfi B, Podestà A, Costa B, Da Pozzo E, Martini C, Breschi MC, Nieri P. *Anticancer Drugs.* 2015 Aug;26(7):754-62. doi: 10.1097/CAD.0000000000000246. PMID:25974027.
24. New quinolone- and 1,8-naphthyridine-3-carboxamides as selective CB2 receptor agonists with anticancer and immuno-modulatory activity. Manera C, Malfitano AM, Parkkari T, Lucchesi V, **Carpi S**, Fogli S, Bertini S, Laezza C, Ligresti A, Saccomanni G, Savinainen JR, Ciaglia E, Pisanti S, Gazzero P, Di Marzo V, Nieri P, Macchia M, Bifulco M. *Eur J Med Chem.* 2015 Jun 5;97:10-8. doi: 10.1016/j.ejmech.2015.04.034. Epub 2015 Apr 24. PMID:25935384.
25. Theranostic properties of a survivin-directed molecular beacon in human melanoma cells. **Carpi S**, Fogli S, Giannetti A, Adinolfi B, Tombelli S, Da Pozzo E, Vanni A, Martinotti E, Martini C, Breschi MC, Pellegrino M, Nieri P, Baldini F. *PLoS One.* 2014 Dec 11;9(12):e114588. doi: 10.1371/journal.pone.0114588. eCollection 2014. PMID:25501971.
26. Selection of a human butyrylcholinesterase-like antibody single-chain variable fragment resistant to AChE inhibitors from a phage library expressed in *E. coli*. Podestà A, Rossi S, Massarelli I, **Carpi S**, Adinolfi B, Fogli S, Bianucci AM, Nieri P. *MAbs.* 2014 Jul-Aug;6(4):1084-93. PMID:24675419.
27. Complex nanostructures based on oligonucleotide optical switches and nanoparticles for intracellular mRNA sensing and silencing. Adinolfi B, **Carpi S**, Giannetti A, Nieri, Pellegrino M, Sotgiu G, Tombelli S, Trono C, Varchi G, Baldini F. *Procedia Engineering* 87 (2014) 751 – 754. doi: 10.1016/j.proeng.2014.11.645.

Book Chapters

1. Circulating microRNAs in cutaneous melanoma diagnosis and prognosis. **Carpi S**, Polini B, Fogli S, Nieri P, Romanini A. Book chapter in "Management of Malignant Melanoma", SM Group Open Access eBooks, ISBN: 978-1-944685-74-4.

ORAL COMMUNICATIONS

1. **S. Carpi**, E. Scoditti, M. Massaro, B. Polini, C. Manera, M. Digiocomo, J. Esposito Salsano, G. Poli, T. Tuccinardi, S. Doccini, F. M. Santorelli, M. A. Carluccio, M. Macchia, M. Wabitsch, R. De Caterina and P. Nieri. The extra-virgin olive oil polyphenols oleocanthal and oleacein counteract inflammation-related gene and miRNA expression in adipocytes. International congress: EVOO Research's Got Talent 2020, Bari, Italy, 20-22 January 2020
2. **S. Carpi**, B. Polini, Leena Ylösmäki, Erkko Ylösmäki, Vincenzo Cerullo, Antonella Romanini, P. Nieri. miR- 193a as new potential therapeutic agent and biomarker in cutaneous melanoma. 39° Congresso Nazionale della Società Italiana di Farmacologia, 20- 23 Novembre 2019 Firenze (Italy)
3. **S. Carpi**, M Massaro, B Polini, M Digiocomo, C Manera, M Macchia, E Scoditti, P Nieri. Ruolo di oleocantale, oleaceina e idrossitirosole nella modulazione, a livello trascrizionale e epigenetico, del processo infiammatorio in un modello in vitro di adipociti. IX Congresso Nazionale SINut, 30-31.05-1.06.2019 Bologna
4. **S. Carpi**, A. Romanini. Trabectedina/miRNA. XXIII Riunione Annuale ISG, Italian Sarcoma Group, April 4-6, 2019 Pisa (Italy)
5. **S. Carpi**, M Massaro, B Polini, M Digiocomo, C Manera, E Scoditti, P Nieri. Extra virgin olive oil polyphenols modulate the expression of key inflammatory genes and miRNAs in human adipocytes. Convegno Monotematico SIF, Le Basi Farmacologiche Dei Nutraceutici, Napoli 29-30 Marzo 2019.
6. **S. Carpi**. miR-193a: potential therapeutic agent and biomarker in cutaneous melanoma. International congress: "World Congress on Cancer Research & Therapy" August 13-15, 2018 Rome (Italy).
7. **S. Carpi**, S. Fogli, A. Giannetti, B. Adinolfi, S. Tombelli, F. Baldini, E. Da Pozzo, A. Vanni, E. Martinotti, C. Martini, M. C. Breschi, M. Pellegrino, P. Nieri. Theranostic properties of a survivin-directed molecular beacon in human melanoma cells. "XVII Seminario Società Italiana di Farmacologia" September 16-18, 2014 Rimini (Italy).

GRANT

1. Collaborator in the project PRA_2020_46 "Fermented cereals to reduce the obesity-related comorbidities: preclinical and clinical evaluations" From 09.2020 to 08.2022.
2. Principal Investigator of the project "Evaluation of concentrated glycerol extract of olive leaf polyphenols on an in vitro model of cutaneous melanoma", funded by Arisi S.s. Società Agricol. From 07.2020 to 01.2021
3. Principal Investigator of the project "Pharmacological role of miR-193a in cutaneous melanoma" funded by "Associazione Contro il Melanoma ACM ONLUS" (Italian association against melanoma). From 03.2018 to 03.2020.
4. Collaborator in the project "Multi-target modulation of the endocannabinoid system as an innovative therapeutic approach for multiple sclerosis" funded by "Fondazione dell'Associazione Italiana Sclerosi Multipla (FISM)" (Italian foundation multiple sclerosis). From 04.2018 to 04.2019.
5. Principal Investigator of the project "Evaluation of concentrated glycerol extract of olive leaf polyphenols on an in vitro model of cutaneous squamous cell carcinoma", funded by Arisi Giacomo & Figli S.R.L. From 04.2019 to 09.2019

EDITORIAL ACTIVITY



Guest Editor for the Special Issue "Non-Coding RNAs as Mediators of the Activity of Natural Compounds", Frontiers in Pharmacology – Translational Pharmacology (from 17-04-2020 to present)

Editor for the journal "SIF RICERCA DI BASE" of the Società Italiana di Farmacologia, www.sifweb.it (from Jan 2020 to present)

Journal Topic Board of Life https://www.mdpi.com/journal/life/topic_editors

PEER-REVIEW ACTIVITY

Referee for "Evaluation for post-doc positions 2019 at University of Piemonte Orientale"

Referee for "Bando di Ateneo per la Ricerca di Base – Anno 2019- Università di VERONA"

Referee for PhD Thesis

Pharmacology & Therapeutics

Frontiers in Pharmacology

British Journal of Cancer

Cancer Medicine

Environmental Toxicology

Experimental Cell Research

Journal of Investigative Dermatology

Journal of Dermatological Science

MedChemComm

Molecular Cancer

Oncogene

Tumor Biology

Nutrients

Cancers

Cell Death & Disease

International Journal of Molecular Sciences

Molecular Nutrition & Food Research

PROFESSIONAL MEMBERSHIP

Società italiana di Farmacologia (SIF)- member of the Working Groups on "Farmacologia oncologica" and "Farmacognosia, Fitoterapia e Nutraceutica"

Società Italiana di Fitoterapia (S.I.Fit.)

Società Italiana di Nutraceutica (SiNut)

MAIN TECHNICAL SKILLS

- Basic methodologies of molecular biology (Cell cultures, protein analyses by Western blot and ELISA)
- Gene Expression analysis (RT-PCR).
- miRNA expression evaluation (RT-PCR).
- Basic knowledge of mouse models .

25/08/2020

