PERSONAL INFORMATION

Maria Cristina Bonferoni

Department of Drug Sciences, University of Pavia, Vle Taramelli12, Pavia, 27100, Italy

+39 0382 987375

mariacristina.bonferoni@unipv.it

https://www.researchgate.net/profile/Maria-Cristina-Bonferoni; https://www.linkedin.com/in/cristina-bonferoni-040b9910/

Sex Female | *Date of birth 23*/08/1960 | *Nationality* Italian

Enterprise	University	EPR
☐ Management Level	☒ Full professor	☐ Research Director and 1st level Technologist / First Researcher and 2nd level Technologist
☐ Mid-Management Level	☐ Associate Professor	☐ Level III Researcher and Technologist
☐ Employee / worker level	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

WORK EXPERIENCE

2018-	Full Professor, Pharmaceutical Technology (SSD CHIM09), Department of Drug Sciences, University of Pavia
2018-	Deputy Director of the Department of Drug Sciences of the University of Pavia
2015-	Responsible for UniPV of the Cooperation Agreement between the Universities of Pavia and Sassari
2013-	Member of the Quality Assurance team of the University of Pavia for the Science Area
2010-2013	Member of Scientific Committee of the Interuniversity Consortium TEFARCO Innova
2010-2013	Coordinator of the II level “Master Course in Preformulation, Pharmaceutical Development and Control of Medicinal products”
2005-2010	Member of Directive Committee of the Interuniversity Consortium TEFARCO Innova
2005-	Member of the Teaching Board of PhD School of Biopharmaceutics and Pharmacokinetics, Universities of Parma and Pavia, from 2014 of PhD School of Experimental Medicine, UniPV, from 2022 of PhD in Chemical and Pharmaceutical Sciences and Industrial Innovation, UniPV
2004-2013	Erasmus Coordinator of the Department of Drug Sciences, University of Pavia
2007-2020	Evaluation of research projects (Israel Science Foundation, French National Research Agency, Miur) and consultant for AIFA for AIC Dossiers evaluation
2001-2018	Associate Professor, Pharmaceutical Technology (SSD CHIM09), Department of Drug Sciences, University of Pavia
1993-2001	Assistant Professor, Pharmaceutical Technology (C08X), Department of Drug Sciences, University of Pavia

EDUCATION AND TRAINING

1992	Graduation in Pharmacy, University of Pavia
1991	Ph.D. Degree in Pharmaceutical Chemistry and Technology, University of Pavia
1987	Specialization School in Industrial Pharmacy, University of Pavia
1984	Graduation in Chemistry and Pharmaceutical Technology, University of Pavia

WORK ACTIVITIES

Editorial activity Co-Editor of "Current Drug Delivery" (Benthamscience) ISSN: 1875-5704 (Online) 1567-2018 (Print); Member of the Editorial Board of: Pharmaceutics (MDPI) ISSN: 1999-4923; Nanomaterials (MDPI) ISSN: 2079-4991; Molecules (MDPI) ISSN: 1420-3049; Smart Materials in Medicine (KeAi) ISSN: 2590-1834.

Invited presentations BIT’s Annual International Symposium of Drug delivery Systems, Praga (2017), EMN Meeting on Biomaterials, Milan (2018), NanoPT2018, Lisboa (2018)

ADDITIONAL INFORMATION

Research expertise and relevant publications

Pharmaceutical development of controlled release formulations.

Study of mucoadhesion mechanisms, development of mucoadhesive dosage forms and of methods to measure mucoadhesion properties

Study of drug-polymer and polymer-polymer ionic interactions to obtain self-assembling microparticulate and nanoparticulate systems intended for mucosal and topical delivery of drugs

Development and characterization of colloidal systems (polymeric and lipid-based nanoparticles and micelles) for the delivery of poorly soluble drugs. Development of nanoparticles and nanofibers loaded with anti-infectives and antioxidants for wound healing.

Study of the ionic modification of bioactive polysaccharides (chitosan, glycosaminoglycans) with hydrophobic molecules to obtain amphiphilic polymers for the stabilization of nanoemulsions and nanosuspensions, and for the association with polymeric and lipidic nanoparticles (polymer-lipid hybrids). Study of systems for the delivery of neuroprotective agents to CNS by nose-to-brain route.

Development of amphiphilic chitosan coated nanoparticles (CS-NPs) loaded with antioxidants, polyphenols, photodynamic therapy agents, and used as a carrier for the delivery of an antiviral SiRNA.

Total number of publications in peer review journals: 222 (Scopus)
Total number of citations: 7514 (Scopus)
H index: 52 (Scopus)

1) *Comincini, S., Manai, F., Sorrenti, M., Perteghella, S., D'Amato, C., Miele, D., Catenacci, L., Bonferoni, M.C.* Development of Berberine-Loaded Nanoparticles for Astrocytoma Cells Administration and Photodynamic Therapy Stimulation (2023) Pharmaceutics, 15 (4), art. no. 1078

2) *Perteghella, S., Garzoni, A., Invernizzi, A., Sorrenti, M., Boselli, C., Icaro Cornaglia, A., Dondi, D., Lazzaroni, S., Marrubini, G., Caramella, C., Catenacci, L., Bonferoni, M.C*. Nanoemulsions of Clove Oil Stabilized with Chitosan Oleate. Antioxidant and Wound-Healing Activity (2023) Antioxidants, 12 (2), art. no. 273,

3) *Catenacci, L., Vicatos, A.I., Sorrenti, M., Edmonds-Smith, C., Bonferoni, M.C., Caira, M.R.* Complexation between the Antioxidant Pterostilbene and Derivatized Cyclodextrins in the Solid State and in Aqueous Solution (2023) Pharmaceuticals, 16 (2), art. no. 247,

4) *Miele, D., Sorrenti, M., Catenacci, L., Minzioni, P., Marrubini, G., Amendola, V., Maestri, M., Giunchedi, P., Bonferoni, M.C.* Association of Indocyanine Green with Chitosan Oleate Coated PLGA Nanoparticles for Photodynamic Therapy (2022) Pharmaceutics, 14 (8), art. no. 1740,

5) *Catenacci, L., Sorrenti, M., Milanese, C., Valentino, C., Vicatos, A.I., Caira, M.R., Bonferoni, M.C.* An update on solid-state characterization of the polyphenol pterostilbene (2022) Journal of Drug Delivery Science and Technology, 71, art. no. 103331

6) *Catenacci, L., Vicatos, A.I., Sorrenti, M., Bonferoni, M.C., Caira, M.R.* Native cyclodextrins as complexation agents for pterostilbene: Complex preparation and characterization in solution and in the solid state (2022) Pharmaceutics, 14 (1), art. no. 8

7) *Miele, D., Xia, X., Catenacci, L., Sorrenti, M., Rossi, S., Sandri, G., Ferrari, F., Rossi, J.J., Bonferoni, M.C.* Chitosan oleate coated PLGA nanoparticles as siRNA drug delivery system (2021) Pharmaceutics, 13 (10), art. no. 1716

8) *Catenacci, L., Marrubini, G., Sorrenti, M., Rossi, S., Sandri, G., Ferrari, F., Fagnani, V., Valentino, C., Bonferoni, M.C.* Design of experiments-assisted development of clotrimazole-loaded ionic polymeric micelles based on hyaluronic acid (2020) Nanomaterials, 10 (4), art. no. 635

9) *Miele, D., Rossi, S., Sandri, G., Vigani, B., Sorrenti, M., Giunchedi, P., Ferrari, F., Bonferoni, M.C.* Chitosan oleate salt as an amphiphilic polymer for the surface modification of poly-lactic-glycolic acid (PLGA) nanoparticles. Preliminary studies of mucoadhesion and cell interaction properties (2018) Marine Drugs, 16 (11), art. no. 447

10) *Bonferoni, M.C., Sandri, G., Rossi, S., Dellera, E., Invernizzi, A., Boselli, C., Cornaglia, A.I., Del Fante, C., Perotti, C., Vigani, B., Riva, F., Caramella, C., Ferrari, F.* Association of alpha tocopherol and ag sulfadiazine chitosan oleate nanocarriers in bioactive dressings supporting platelet lysate application to skin wounds (2018) Marine Drugs, 16 (2), art. no. 56,

11) *Bonferoni, M.C., Riva, F., Invernizzi, A., Dellera, E., Sandri, G., Rossi, S., Marrubini, G., Bruni, G., Vigani, B., Caramella, C., Ferrari, F.* Alpha tocopherol loaded chitosan oleate nanoemulsions for wound healing. Evaluation on cell lines and ex vivo human biopsies, and stabilization in spray dried Trojan microparticles (2018) European Journal of Pharmaceutics and Biopharmaceutics, 123, pp. 31-41

12) *Bonferoni, M.C., Sandri, G., Rossi, S., Usai, D., Liakos, I., Garzoni, A., Fiamma, M., Zanetti, S., Athanassiou, A., Caramella, C., Ferrari, F.* A novel ionic amphiphilic chitosan derivative as a stabilizer of nanoemulsions: Improvement of antimicrobial activity of Cymbopogon citratus essential oil (2017) Colloids and Surfaces B: Biointerfaces, 152, pp. 385-392