PERSONAL INFORMATION

Prof. Maria Chiara Monti

University of Salerno

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Gender F | *Date of birth* 15/01/1977 | *Nationality* Italian

Enterprise	University	EPR
☐ Management Level	☐ Full professor	☐ Research Director and 1st level Technologist / First Researcher and 2nd level Technologist / Principal Investigator
☐ 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

2006-2015 Researcher in Organic Chemistry at the Department of Pharmaceutical Science of University of Salerno.

2015-current Associate Professor of Organic Chemistry at the Department of Pharmacy of University of Salerno, teaching Organic Chemistry and Bio-Organic Chemistry.

RESEARCH ACTIVITIES

Prof. Maria Chiara Monti has been trained both in classical protein biochemistry and in bio-molecular mass spectrometry. Her research is focalized on the investigation of different aspects of protein-ligand interaction as well as on functional and chemical proteomics.

EDUCATION AND TRAINING

30th October 2000 Degree in Chemistry at the University of Naples “Federico II” with 110/110 cum laude.

2001-2004 Ph.D. three-year Course in Pharmaceutical Sciences at the Department of Pharmaceutical Sciences, University of Salerno.

2005 Marie Curiè fellowship at the Bijovet Centre of Utrecht University (HeckLab).

WORK ACTIVITIES

Editorial activity

- Editor for Marine Drugs and Frontiers in Chemistry;
- Reviewer for Nature Communication, Redox Biology, Journal of Advanced Research, Antioxidants, RCS Advances, Scientific Reports, PLoS One, Marine Drugs, Frontiers, Food Research International, Molecules, Journal of Functional Food, ChemBioChem, Biomolecules, Journal of Mass Spectrometry, Planta Medica, Pharmaceutics, International Journal of Mass Spectrometry, Medicinal Chemistry, Nanoscale, et al.

Invited presentations

- Monti M.C., A functional proteomics-based platform to disclose small molecules cellular targets., ICAP 2022, Lisbona, Portugal.
- Monti M.C., Functional Proteomic Tools to Disclose Natural Products Interactome, ISSNP 2021,
- Monti M.C., The role of functional proteomics in disclosing natural products targets, GRK2158 Colloquium, Dusseldorf, 2020.
- Monti M.C., A functional proteomic-based platform to disclose natural products cellular targets, Repositioning Natural Products in Drug Discovery, UNIMORE, 2020.
- Monti M.C., Proteomic Approaches to Disclose Natural Products Cellular Targets, GRK2158 Symposium, Düsseldorf, Germany, 2019.
- Monti M.C., Chemical proteomics of natural compounds useful for the development of nutraceutics. 4th MS Food day Foggia (Italy), 2015.
- Monti M.C. Bioactive natural compounds target discovery by chemical proteomics, Waters [Proteomics and metabolomis profiling] University of Salerno, 2011.

- M.C. Monti, Molecular Basis of Human Group IIa Phospholipase A2 Inhibition by Marine Natural Products. MASSA 2007 Italian Annual Meeting on Mass Spectrometry, Lucca (Italy), 2007.

Grants

- PON-FESR 2007-2013 Bando Sportello dell'Innovazione "Valutazione dell'interazione di dispositivi nano particellari per il rilascio di molecole bioattive con i loro potenziali bersagli molecolari financed by Regione Campania," € 65.000 (2016/2017).
- Contratto di Sviluppo "ALTERGON ITALIA" (CDS000463) financed by Ministero dello Sviluppo Economico € 1.022.500 (2018-2022).
- PRIN 2017 (2017FJZZRC) 'Intestinal microbiota, bile acids activated receptors and metabolism: development of novel therapeutic targets in the treatment of steato-hepatitis (NASH).' Financed by MIUR €150.000 (2019-2022).

MOST RELEVANT PUBLICATIONS

- Di Giorgio, et al. Repositioning Mifepristone as a Leukaemia Inhibitory Factor Receptor Antagonist for the Treatment of Pancreatic Adenocarcinoma (2022) Cells, 11 (21), art. no. 3482. DOI: 10.3390/cells11213482
- Turiello, R., et al. Exosomal CD73 from serum of patients with melanoma suppresses lymphocyte functions and is associated with therapy resistance to anti-PD-1 agents (2022) Journal for ImmunoTherapy of Cancer, 10 (3), art. no. e004043. DOI: 10.1136/jitc-2021-004043
- Biagioli, M., et al. Combinatorial targeting of G-protein-coupled bile acid receptor 1 and cysteinyl leukotriene receptor 1 reveals a mechanistic role for bile acids and leukotrienes in drug-induced liver injury (2022) Hepatology. DOI: 10.1002/hep.32787
- Morretta, E., et al. Novel insights on the molecular mechanism of action of the anti-angiogenic pyrazolyl-urea GeGe-3 by functional proteomics (2021) Bioorganic Chemistry, 115, art. no. 105168. DOI: 10.1016/j.bioorg.2021.105168
- Turiello, R., et al. Serum CD73 is a prognostic factor in patients with metastatic melanoma and is associated with response to anti-PD-1 therapy. (2020) J Immunother Cancer. Dec;8(2): e001689. doi: 10.1136/jitc-2020-001689
- D'Errico, G., et al. Tumor-associated macrophage-secreted 14-3-3ζ signals via AXL to promote pancreatic cancer chemoresistance (2019) Oncogene, 38 (27), pp. 5469-5485. DOI: 10.1038/s41388-019-0803-9
- Del Gaudio, F., et al. Chemoproteomic fishing identifies arzanol as a positive modulator of brain glycogen phosphorylase (2018) Chemical Communications, 54 (91), pp. 12863-12866. DOI: 10.1039/c8cc07692h
- Tommasone, S., et al. Biomolecular Fishing for Calixarene Partners by a Chemoproteomic Approach (2015) Angewandte Chemie - International Edition, 54 (51), pp. 15405-15409. DOI: 10.1002/anie.201508651
- Cassiano, C., et al. In cell scalaradial interactome profiling using a bio-orthogonal clickable probe (2014) Chemical Communications, 50 (45), pp. 6043-6045. DOI: 10.1039/c4cc00989d
- Cassiano, C., et al. Heteronemin, a marine sponge terpenoid, targets TDP-43, a key factor in several neurodegenerative disorders (2014) Chemical Communications, 50 (4), pp. 406-408. DOI: 10.1039/c3cc45454a
- Monti, M.C., et al. Native mass spectrometry provides direct evidence for DNA mismatch-induced regulation of asymmetric nucleotide binding in mismatch repair protein MutS (2011) Nucleic Acids Research, 39 (18), pp. 8052-8064. DOI: 10.1093/nar/gkr498.
- Margarucci, L. et al., Chemical proteomics discloses petrosapongiolide M, an anti-inflammatory marine sesterterpene, as a proteasome inhibitor (2010) Angewandte Chemie - International Edition, 49 (23), pp. 3960-3963. DOI: 10.1002/anie.200907153
- Monti, M.C., et al., Interactions of Kid-Kis toxin-antitoxin complexes with the parD operator-promoter region of plasmid R1 are piloted by the Kis antitoxin and tuned by the stoichiometry of Kid-Kis oligomers (2007) Nucleic Acids Research, 35 (5), pp. 1737-1749. DOI: 10.1093/nar/gkm073.