CURRICULUM VITAE OF SIMONA PICCOLELLA, DR. PHD

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CURRENT POSITION

Researcher of General and Inorganic Chemistry since 12.15.2011 at the Department of Environmental, Biological and Pharmaceutical Science and Technology, University of Campania "L. Vanvitelli" (Caserta, Italy).

EDUCATION AND TRAINING

2007-2010	PhD course in "Risorse e Ambiente" - University of Campania "L. Vanvitelli" (Caserta, Italy).
2008	XII Mass Spectrometry Course for PhD students – Siena (Italy).
2007	Phytochemistry School "P. Ceccherelli" – Tempio Pausania (Olbia Tempio, Italy).
2000-2006	Degree in "Medicinal chemistry and pharmaceutical technology" – University of Pisa (Italy).

TEACHING ACTIVITIES

a.y. 2005/06- 2012/13	*Stoichiometry and laboratory practices* for the *General and Inorganic Chemistry* course (Bachelor's Degree in Biological Science, Second University of Naples).
a.y. 2009/10-2012/13	*Stoichiometry and laboratory practices* for the *General and Inorganic Chemistry* course (Bachelor's Degree in Physics, Second University of Naples).
a.y. 2012/13-2013/14	*Application of radioisotopes in Biology* (Bachelor's Degree in Biological Science, Second University of Naples).
a.y. 2014/15	*Chemistry of Radioisotopes* (Single Cycle Master's Degree in Pharmacy, Second University of Naples).
a.y. 2013/14-2017/18	*Analysis of food pollutants* (part of the *Pollutants Monitoring* course) (Master's degree in Science and Technology for Environment and Territory, University of Campania "Luigi Vanvitelli").
a.y. 2013/14-present	*Chemical methods for molecular analysis* (Bachelor's Degree in Environmental Science, University of Campania "Luigi Vanvitelli").
a.y. 2015/16-present	*General and Inorganic Chemistry* (Single Cycle Master's Degree in Pharmacy, University of Campania "Luigi Vanvitelli").
a.y. 2017/18-present	*General and Inorganic Chemistry* (part of the *Chemical and Physical Science* course) (Bachelor's Degree in Prevention Techniques in Workplaces, University of Campania "Luigi Vanvitelli").

MAIN RESEARCH ACTIVITIES

The research activity of Dr. Piccolella is documented by 43 publications on peer reviewed international journals, 2 chapter in volume and a number of communications to national and international conferences. The main research topics are: 1) structural characterization of plant secondary metabolites by NMR and HR-MS; 2) metabolic profiling of medicinal and/or edible plants by UHPLC/HR-MS techniques; 3) *in vitro* evaluation of antioxidant capacity, cytotoxic or chemopreventive and neuroprotective properties of natural products (phytocomplexes and pure compounds).

EDITORIAL ACTIVITY

2019 Guest Editor of the Special Issue "Food Bioactives: Chemical Challenges and Bio-Opportunities" published in *Molecules* (ISSN: 1420-3049), "Natural Products Chemistry" section.

2018-present Member of the Editorial Board of *Science Journal of Analytical Chemistry (SJAC)* (ISSN: 2376-8045 *Print*; ISSN: 2376-8053 *Online*)

2016-present Peer-reviewer of the following journals: *Food Research International; Journal of Functional Foods; Journal of Agricultural and Food Chemistry; Journal of Analytical Methods in Chemistry; Current Medicinal Chemistry; European Journal of Medicinal Chemistry; Biochemical Systematics and Ecology; Molecules.*

ORGANIZATION OF SCIENTIFIC CONFERENCES

Member of the organizing committee of the "Convegno Nazionale della Divisione di Chimica dei Sistemi Biologici 2018" – Caserta (26-28 september 2018).

Member of the scientific committee of "4th International Conference on Food and Biosystems Engineering (FABE 2019)" – Crete (30 may-2 june).

LIST OF PUBLICATIONS

‡First co-authorship
*Corresponding author

1. **Piccolella S**, Bianco A, Crescente G, Santillo A, Chieffi Baccari G, Pacifico S. Recovering *Cucurbita pepo* cv. 'Lungo Fiorentino' wastes: UHPLC-HRMS/MS metabolic profile, the basis for establishing their nutra- and cosmeceutical valorization. Molecules **2019**, 24, 1479.
2. Catauro M, Barrino F, Dal Poggetto G, Pacifico F, **Piccolella S**, Pacifico S. Chlorogenic acid/PEG-based organic-inorganic hybrids: A versatile sol-gel synthesis route for new bioactive materials. Materials Science and Engineering C **2019**, 100, 837-844.
3. Brahmi-Chendouh N, **Piccolella S‡**, Crescente G, Pacifico F, Boulekbache L, Hamri-Zeghichi S, Akkal S, Madani K, Pacifico S. A nutraceutical extract from Inula viscosa leaves: UHPLC-HR-MS/MS based polyphenol profile, and antioxidant and cytotoxic activities. Journal of Food and Drug Analysis**, 2019**, *in press*. https://doi.org/10.1016/j.jfda.2018.11.006
4. Catauro M, Barrino F, Dal Poggetto G, Crescente G, **Piccolella S**, Pacifico S. Chlorogenic Acid Entrapped in Hybrid Materials with High PEG Content: A Strategy to Obtain Antioxidant Functionalized Biomaterials? Materials **2019**, 12(1), 148.
5. Pacifico S, **Piccolella S**, Nocera P, Tranquillo E, Dal Poggetto F, Catauro M. New insights into phenol and polyphenol composition of *Stevia rebaudiana* leaves. Journal of pharmaceutical and biomedical analysis **2019**, 163, 45-57.
6. Faugno S, **Piccolella S‡,** Sannino M, Principio L, Crescente G, Baldi GM, Fiorentino N, Pacifico S. Can agronomic practices and cold-pressing extraction parameters affect phenols and polyphenols content in hempseed oils? Industrial Crops and Products **2019**, 130, 511-519.
7. **Piccolella S***, Crescente G, Nocera P, Pacifico F, Manti L, Pacifico S. Ultrasound-assisted aqueous extraction, LC-MS/MS analysis and radiomodulating capability of autochthonous Italian sweet cherry fruits. Food & Function **2018**, 9, 1840-1849.
8. Pacifico S, Galasso S, **Piccolella S**, Kretschmer N, Pan S-P, Nocera P, Lettieri A, Bauer R, Monaco P. Winter wild fennel leaves as a source of anti-inflammatory and antioxidant polyphenols. Arabian Journal of Chemistry **2018**, 11, 513-524.
9. Crescente G, **Piccolella S**, Esposito A, Scognamiglio M, Fiorentino A, Pacifico S. Chemical composition and nutraceutical properties of hempseed: an ancient food with actual functional value. Phytochemistry reviews **2018**, 17(4), 733-749.
10. **Piccolella S***, Crescente G, Pacifico F, Pacifico S. Wild aromatic plants bioactivity: a function of their (poly)phenol seasonality? A case study from Mediterranean area. Phytochemistry reviews **2018**, 17(4), 785-799.
11. D'Abrosca G, Paladino A, Cuoco E, Marasco R, Pacifico S, **Piccolella S**, Vastano V, Sacco M, Isernia C, Muscariello L, Malgieri G. Structural Characterization of the Lactobacillus Plantarum FlmC Protein Involved in Biofilm Formation. Molecules **2018**, 23(9), 2252.
12. Woodrow P, Ciarmiello LF, Annunziata MG, Pacifico S, Iannuzzi F, Mirto A, D'Amelia L, Dell'Aversana E, **Piccolella S**, Fuggi A, Carillo P. Durum wheat seedling responses to simultaneous high light and salinity involve a fine reconfiguration of amino acids and carbohydrate metabolism. Physiologia Plantantarum **2017**, 159, 290-312.
13. Pacifico S, **Piccolella S**, Lettieri A, Nocera P, Bollino F, Catauro M. A metabolic profiling approach to an Italian sage leaf extract (SoA541) defines its antioxidant and anti-acetylcholinesterase properties. Journal of Functional Foods **2017**, 29, 1-9.

14. Landi N, Pacifico S, Ragucci S, Iglesias R, **Piccolella S**, Amici A, Di Giuseppe AMA, Di Maro A. Purification, characterization and cytotoxicity assessment of Ageritin: The first ribotoxin from the basidiomycete mushroom *Agrocybe aegerita*. Biochimica et Biophysica Acta - General Subjects **2017**, 1861, 1113-1121.
15. Pacifico S, **Piccolella S**, Nocera P, Tranquillo E, Dal Poggetto F, Catauro M. Steviol glycosides content in cultivated *Stevia rebaudiana* Bertoni: A new sweet expectation from the Campania region (Italy). Journal of Food Composition and Analysis **2017**, 63, 111-120.
16. Ricciardi V, Portaccio M, **Piccolella S**, Manti L, Pacifico S, Lepore M. Study of SH-SY5Y cancer cell response to treatment with polyphenol extracts using FT-IR spectroscopy. Biosensors **2017**, 7(4), Article number 57.
17. Landi N, Pacifico S, Ragucci S, Di Giuseppe AMA, Iannuzzi F, Zarrelli A, **Piccolella S**, Di Maro A. Pioppino mushroom in southern Italy: an undervalued source of nutrients and bioactive compounds. Journal of the Science of Food and Agriculture **2017**, 97, 5388-5397.
18. Catauro M, Bollino F, Papale F, **Piccolella S**, Pacifico S. Sol-gel synthesis and characterization of SiO_2/PCL hybrid materials containing quercetin as new materials for antioxidant implants. Materials Science and Engineering C **2016**, 58, 945-952.
19. Pacifico S, **Piccolella S**, Papale F, Nocera P, Lettieri A, Catauro M. A polyphenol complex from *Thymus vulgaris* L. plants cultivated in the Campania Region (Italy): new perspectives against neuroblastoma. Journal of Functional Foods **2016**, 20, 253-266.
20. Pacifico S, **Piccolella S**, Galasso S, Fiorentino A, Kretschmer N, Pan S-P, Bauer R, Monaco P. Influence of harvest season on chemical composition and bioactivity of wild rue plant hydroalcoholic extracts. Food and Chemical Toxicology **2016**, 90, 102-111.
21. **Piccolella S**, Nocera P, Carillo P, Woodrow P, Greco V, Manti L, Fiorentino A, Pacifico S. An apolar *Pistacia lentiscus* L. leaf extract: GC-MS metabolic profiling and evaluation of cytotoxicity and apoptosis inducing effects on SH-SY5Y and SK-N-BE(2)C cell lines. Food and Chemical Toxicology **2016**, 95, 64-74.
22. Catauro M, Bollino F, Nocera P, **Piccolella S**, Pacifico S. Entrapping quercetin in silica/polyethylene glycol hybrid materials: Chemical characterization and biocompatibility. Materials Science and Engineering C **2016**, 68, 205-212.
23. Pacifico S, Galasso S, **Piccolella S**, Kretschmer N, Pan S-P, Marciano S, Bauer R, Monaco P. Seasonal variation in phenolic composition and antioxidant and anti-inflammatory activities of *Calamintha nepeta* (L.) Savi. Food Research International **2015**, 69, 121–132.
24. Catauro M, Papale F, Bollino F, **Piccolella S**, Marciano S, Nocera P, Pacifico S. Silica/quercetin sol–gel hybrids as antioxidant dental implant materials. Science and Technology of Advanced Materials **2015**, 16, 035001.
25. Landi N, Pacifico S, **Piccolella S**, Di Giuseppe AMA, Mezzacapo MC, Ragucci S, Iannuzzi F, Zarrelli A, Di Maro A. Valle Agricola lentil, an unknown lentil (Lens culinaris Medik.) seed from Southern Italy as a novel antioxidant and prebiotic source. Food and Function **2015**, 6, 3155-3164.
26. Faramarzi S, Pacifico S, Yadollahi A, Lettieri A, Nocera P, **Piccolella S**. Red-fleshed apples: old autochthonous fruits as a novel source of anthocyanin antioxidants. Plant Foods for Human Nutrition **2015**, 70, 324-330.
27. Pacifico S, Di Maro A, Petriccione M, Galasso S, **Piccolella S**, Di Giuseppe AMA, Scortichini M, Monaco P. Chemical composition, nutritional value and antioxidant properties of autochthonous *Prunus avium* cultivars from Campania Region. Food Research International **2014**, 64,188–199.

28. Galasso S, Pacifico S, Kretschmer N, Pan SP, Marciano S, **Piccolella S**, Monaco P, Bauer R. Influence of seasonal variation on *Thymus longicaulis* C. Presl chemical composition and its antioxidant and anti-inflammatory properties. Phytochemistry **2014**, 107, 80-90.
29. Pacifico S, **Piccolella S**, Marciano S, Galasso S, Nocera P, Piscopo V, Fiorentino A, Monaco P. LC-MS/MS Profiling of a Mastic Leaf Phenol Enriched Extract and Its Effects on H_2O_2 and Aβ(25-35) Oxidative Injury in SK-B-NE(C)-2 Cells. Journal of Agricultural and Food Chemistry **2014**, 62, 11957-11966.
30. Ricci A, **Piccolella S**, Pepi F, Garzoli S, Giacomello P. The mechanism of 2-furaldehyde formation from D-xylose dehydration in the gas phase. A tandem mass spectrometric study. Journal of the American Society for Mass Spectrometry **2013**, 24, 1082-1089.
31. Ricci A, **Piccolella S**, Pepi F, Patsilinakos A, Ragno R, Garzoli S, Giacomello P. Gas-phase basicity of 2-furaldehyde. Journal of Mass Spectrometry **2012**, 47, 1488-1494.
32. Pacifico S, D'Abrosca B, Scognamiglio M, Gallicchio M, Potenza N, **Piccolella S**, Russo A, Monaco P, Fiorentino A. Metabolic profiling of strawberry grape (*Vitis x labruscana* cv. 'Isabella') components by NMR, and evaluation of their antioxidant and antiproliferative properties. Journal of Agricultural and Food Chemistry **2011**, 59, 7679-7687.
33. D'Abrosca B, Fiorentino A, Ricci A, Scognamiglio M, Pacifico S**, Piccolella S**, Monaco P. Structural characterization and radical scavenging activity of monomeric and dimeric cinnamoyl glucose esters from *Petrorhagia velutina* leaves. Phytochemistry Letters **2010**, 3,38-44.
34. Ricci A, Fiorentino A, **Piccolella S**, D'Abrosca B, Pacifico S, Monaco P. Structural discrimination of isomeric tetrahydrofuran lignan glucosides by tandem mass spectrometry. Rapid Communications in Mass Spectrometry **2010**, 24, 979-985.
35. Ricci A, **Piccolella S**, Fiorentino A, Pepi F, D'Abrosca B, Monaco P. A tandem mass spectrometric investigation of the low-energy collision-activated fragmentation of *neo*-clerodane diterpenes. Rapid Communications in Mass Spectrometry **2010**, 24, 1543–1556.
36. Pacifico S, Scognamiglio M, **Piccolella S**, Gallicchio M, Ricci A, Fiorentino A, D'Abrosca B. Spectroscopic characterization and antiproliferative activity on HepG2 human hepatoblastoma cells of C-glycosyl flavones from *Petrorhagia velutina.* Journal of Natural Products **2010**, 73, 1973-1978.
37. Fiorentino A, Ricci A, D'Abrosca B, Golino A, Izzo A, Pascarella MT, **Piccolella S**, Esposito A. Kaempferol glycosides from *Lobularia maritima* and their potential role in plant interactions. Chemistry & Biodiversity **2009**, 6, 204-217.
38. Fiorentino A, D'Abrosca B, Ricci A, Pacifico S, **Piccolella S**, Monaco P. Structure determination of chamaedryosides A-C, three novel nor-*neo*-clerodane glucosides from *Teucrium chamaedrys*, by NMR spectroscopy. Magnetic Resonance in Chemistry **2009**, 47(11), 1007-1012.
39. **Piccolella S**, Fiorentino A, Pacifico S, D'Abrosca B, Uzzo P, Monaco P. Antioxidant properties of sour cherries (*Prunus cerasus* L.): role of colorless phytochemicals from the methanolic extract of ripe fruits. Journal of Agricultural and Food Chemistry **2008**, 56(6), 1928-1935.
40. Pacifico S, D'Abrosca B, Golino A, Mastellone C, **Piccolella S**, Fiorentino A, Monaco P. Antioxidant evaluation of polyhydroxylated nerolidols from redroot pigweed (*Amaranthus retroflexus*) leaves. LWT - Food Science and Technology **2008**, 41(9), 1665-1671.
41. Fiorentino A, Ricci A, D'Abrosca B, Pacifico S, Golino A, Letizia M, **Piccolella S**, Monaco P. Potential food additives from *Carex distachya* roots: identification and in vitro antioxidant properties. Journal of Agricultural and Food Chemistry **2008**, 56(17), 8218-8225.
42. Ricci A, Fiorentino A, **Piccolella S**, Golino A, Pepi F, D'Abrosca B, Letizia M, Monaco P. Furofuranic glycosylated lignans: a gas-phase ion chemistry investigation by tandem mass spectrometry. Rapid Communications in Mass Spectrometry **2008**, 22(21), 3382-3392.

43. Fiorentino A, D'Abrosca B, Pacifico S, Mastellone C, **Piccolella S**, Monaco P. Isolation, structure elucidation, and antioxidant evaluation of cydonioside A, an unusual terpenoid from the fruits of *Cydonia vulgaris*. Chemistry & Biodiversity **2007**, 4(5), 973-979.

LIST OF CHAPTERS IN VOLUME

1. Ricci A, **Piccolella S**. *From the Collisionally Induced Dissociation to the Enzyme-Mediated Reactions: The Electron Flux Within the Lignan Furanic Ring*. In: Tandem Mass Spectrometry - Applications and Principles, edited by Jeevan K. Prasain, ISBN 978-953-51-0141-3, InTech, **2012**.
2. **Piccolella S**, Pacifico S. *Plant-derived polyphenols: a chemopreventive and chemoprotectant worth-exploring resource in toxicology*. In: Advances in Molecular Toxicology, edited by James C. Fishbein and Jacqueline M. Heilman, ISBN: 978-0-12-802229-0, ISSN: 1872-0854, Elsevier, **2015**.