

PERSONAL INFORMATION

Arianna Marengo

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RESEARCH EXPERIENCE

October-December 2020

Visiting researcher

Dr. Koit Herodes

University of Tartu, Faculty of Science and Technology, Institute of Chemistry, Ravila 14a, 50411Tartu (Estonia)

▪ Project: UHPLC-MS/MS analysis of compounds with amino groups from plant matrices

September 2020-present

Research position (fixed-term researcher type A)

University of Torino, Department of Drug Science and Technology, Via Giuria 9, 10125, Torino
Section: 05/A1 Botany, BIO/15: Pharmaceutical Biology

▪Project: Botanical, phytochemical and biomolecular studies on plants of pharmaceutical, cosmetic and healthy interest

June-August 2020

Research grant

Prof. Patrizia Rubiolo

University of Torino, Department of Drug Science and Technology, Via Giuria 9, 10125, Torino

▪Project: construction of analytical and biomolecular protocols for the study of raw materials of plant origin

(Obtained skills: preparation of plant extracts, HPLC-PDA-MS/MS analysis, GC-MS analysis, collaboration with small local companies for the phytochemical analysis of plants derived matrices)

May 2019-April 2020

Post-DOC position

Prof. Patrizia Rubiolo

University of Torino, Department of Drug Science and Technology, Via Giuria 9, 10125, Torino

▪Project: phytochemical, taxonomical and biomolecular studies on medicinal and aromatic plants

(Obtained skills: preparation of plant extracts, HPLC-PDA-MS/MS analysis, GC-MS analysis, biomolecular analysis: DNA extraction, PCR, gel electrophoresis, nucleotide sequences analysis, collaboration with small local companies for the phytochemical analysis of plants derived matrices)

October-December 2018

Visiting Post DOC

Prof. Jared L. Anderson

Iowa State University, Department of Chemistry, Ames, Iowa 50011 (USA)

▪ Project: *Arabidopsis thaliana* ITS sequence-specific DNA extraction by ion-tagged oligonucleotides coupled with a magnetic ionic liquid (Obtained skills: ion-tagged oligonucleotides synthesis, sequence-specific extraction with advanced techniques, PCR, real-time PCR, DNA purification)

June 2018-April 2019

Research grant

Prof. Patrizia Rubiolo

University of Torino, Department of Drug Science and Technology, Via Giuria 9, 10125, Torino

- Project: botanical, biomolecular and secondary metabolism studies of plants of pharmaceutical, cosmetic and healthy interest (Obtained skills: preparation of plant extracts, HPLC-PDA-MS/MS analysis, GC-MS analysis, biomolecular analysis: DNA extraction, PCR, gel electrophoresis, nucleotide sequences analysis)

July 2017-June 2018 **Post-DOC position**

Prof. Patrizia Rubiolo

University of Torino, Department of Drug Science and Technology, Via Giuria 9, 10125, Torino

- Project: characterization of plants of pharmaceutical, food and cosmetic interest through advanced analytical techniques (Obtained skills: preparation of plant extracts, HPLC-PDA-MS/MS analysis, GC-MS analysis, biomolecular analysis: DNA extraction, PCR, gel electrophoresis, nucleotide sequences analysis)

February-June 2017 **Research grant**

Prof. Patrizia Rubiolo

University of Torino, Department of Drug Science and Technology, Via Giuria 9, 10125, Torino

- Project: plant extract characterization using advanced chemical and biomolecular analysis techniques (Obtained skills: preparation of plant extracts, HPLC-PDA-MS/MS analysis, GC-MS analysis, biomolecular analysis: DNA extraction, PCR, gel electrophoresis, nucleotide sequences analysis)

October 2016 **Visiting PhD student**

Prof. Frédéric Bourgaud

University of Nancy, Plant Advanced Technologies, 13 Rue du Bois de la Champelle, 54500 Vandœuvre-lès-Nancy, France

- Project: evaluation of the antioxidant activity of eight wild edible thistles from Sardinia (Obtained skills: Folin-Ciocalteu assay, DPPH test, ABST test)

July-October 2015 **Visiting PhD student**

Prof. Mario Dell'Agli

University of Milano, Department of Pharmacological and Biomolecular Sciences, University of Milano, Via Balzaretti 9, 20133, Milano

- Project: evaluation of the anti-inflammatory activity of eight wild edible thistles from Sardinia through the inhibition of TNF α -induced IL-8 secretion and NF- κ B pathway in human gastric epithelial AGS cell (Obtained skills: cellular cultures (epithelial gastric cells), ELISA assay, transient transfection (calcium phosphate method), nuclear and cytoplasmatic extraction, Bradford protein assay, luminescence assay, cytotoxicity assays (MTT, LDH))

March-June 2016 **Visiting PhD student**

Prof. Patrizia Rubiolo

University of Torino, Department of Drug Science and Technology, Via Giuria 9, 10125, Torino

- Project: hydroalcoholic extraction and HPLC-PDA-MS/MS analysis of thistles species (Obtained skills: preparation of plant extracts, HPLC-PDA-MS/MS analysis)

November 2014 **Visiting PhD student**

Prof. Cinzia Margherita Bertea

University of Torino, Department of Life Sciences and Systems Biology, Via Quarello 15/A, 10135, Torino

- Project: biomolecular analysis through barcoding genes evaluation from thistles species (Obtained skills: DNA extraction, PCR amplification, gel electrophoresis, nucleotide sequences analysis)

- January 2014-December 2016 **Doctoral degree** EQF:8
 Doctoral School in Earth and Environmental Sciences and Technologies, University of Cagliari
 (Thesis discussed on April 19th, 2017)
 Department of Life and Environmental Sciences, Viale S. Ignazio da Laconi 13, 09123, Cagliari, Italy
 Supervisor: Prof. Andrea Maxia
 Co-tutors: Prof. Patrizia Rubiolo
 Prof. Cinzia M. Bertea
- Thesis title: Valorization of wild edible *Cardueae* species from Sardinia through phytochemical and biomolecular analyses and evaluation of their potential biological properties
 - Obtained skills: plant taxonomy, ethnobotanical analysis, wild plant collection, DNA extraction and biomolecular analysis, hydrodistillation, plant solvent extraction and analysis, evaluation of anti-inflammatory properties of plant extracts.
- October 2011-October 2013 **MSc in Cellular and Molecular Biology, full final grades with honors** EQF:7
 University of Torino, Department of Life Sciences and Systems Biology, Via Accademia Albertina, 13, 10123 Torino
 Supervisor: Prof. Massimo Maffei
- Thesis title: Effect of different light intensities on the expression of ketocarotenoid biosynthetic genes and pigment accumulation in the green alga *Haematococcus pluvialis*
- November 2012-October 2013 **Ungraduate internship and thesis research**
 University of Torino, Plant Physiology Unit, Department of Life Sciences and Systems Biology, University of Torino, Centro della Innovazione, Via Quarello, 15/A, 10135, Torino
 Supervisor: Prof. Massimo Maffei
- Project: pigment and ketocarotenoid biosynthetic genes expression analysis in the green alga *Haematococcus pluvialis*. cellular cultures (algal cells), TLC analysis, spectrophotometric quantification, RNA extraction, cDNA synthesis, quantitative real-time PCR analysis.
- October 2008-July 2011 **BSc in Biological Sciences (final grade 104/110)** EQF:6
 University of Torino, Department of Life Sciences and Systems Biology, Via Accademia Albertina, 13, 10123 Torino
 Supervisor: Prof. Massimo Maffei
- Theoretical dissertation title: Molecular farming: transgenic plants as a source of secondary metabolites
- September 2002-July 2007 **Linguistic High School Diploma (Diploma di Maturità Linguistica con votazione 89/100)** EQF:4
 Scientific High School "G. Ancina", Fossano, Via Tripoli, 4, 12045 Fossano CN

TEACHING ACTIVITIES

March 2021-present

Head of the Plant Biology course at Pharmacy (40h)

University of Torino, Department of Drug Science and Technology, Via Giuria 9, 10125, Torino

July 2021

Course at the Doctoral School in Pharmaceutical and Biomolecular Sciences (2h)

University of Torino, Department of Drug Science and Technology, Via Giuria 9, 10125, Torino

November-December 2019

Laboratory assistant

Laboratory of pharmacognosy, Herbal Sciences and Technologies. Department of Drug Science and Technology, University of Torino
 Prof. Patrizia Rubiolo

October-November 2015

Laboratory Assistant

Plant Biology at Natural Sciences, University of Cagliari
 Prof.: Andrea Maxia

April-May 2015 **Laboratory Assistant**
 Plant Biology at Industrial Biotechnology , University of Cagliari
 Prof.: Mauro Ballero

October 2014-January 2015 **Laboratory Assistant**
 Plant Biology at Pharmaceutical Chemistry and Technology , University of Cagliari
 Prof.: Andrea Maxia

March-May 2012 **Laboratory Assistant**
 Cellular Biology Laboratory at Cellular and Molecular Biology , University of Torino
 Prof.: Michele De Bortoli

ACADEMIC ASSIGNMENTS

June 2022-present **Member of the Third Mission committee**
Member of the communication section (management of the Facebook and Instagram social accounts)
 University of Torino, Department of Drug Science and Technology, Via Giuria 9, 10125, Torino

PERSONAL SKILLS

Mother tongue Italian

Other languages

English FIRST CERTIFICATE (B2)

French DELF CERTIFICATE (B2)

Communication skills

- The good communication skills were gained through the several oral presentations (both in Italian and in English) performed on different occasions. Every year, during the PhD, I illustrated my research project to the academic committee, and a final thesis defence was carried out the last year with the participation of Italian and foreign reviewers. At the same time, I was selected as a speaker or to present posters on my main research topics in several Italian and international conferences. As reported in my CV, I am the first author of 15 research papers and co-author of 26 works published in important international journals. I am used to describe and summarize the research results obtained through the realization of reports and manuscripts. I am in charge of the management of the Department of Drug Science and Technology social accounts (Instagram and Facebook)

Organisational skills

- During my research career I worked in different laboratories, in Italy (Torino, Cagliari, Milano) and abroad (France, USA, Estonia), where I collaborated with different professors and researchers and I actively participated at the project discussions and planning. These experiences made me independent in the experimental planning and development. At the same time, I was involved in the laboratory training of MSc and BSc students, for some of them I was selected as co-supervisor or supervisor. I also collaborated as assistant to some practical laboratories at the Universities of Torino and Cagliari.

- Job-related skills**
- My laboratory skills involve the extraction of compounds of pharmaceutical, cosmetic and healthy interest from plant matrices (maceration, infusion, ultrasound, hydrodistillation) followed by the phytochemical analysis through chromatographic techniques. I have developed a solid expertise in high performance liquid chromatography coupled with a diode array and a triple quadrupole mass spectrometer (HPLC-PDA-MS/MS) as well as gas chromatography coupled with flame ionization detector and mass spectrometer (GC-FID-MS), thin layer chromatography (TLC), flash chromatography. I also performed different biomolecular analysis based on the DNA extraction and purification from plant matrices, PCR amplification and real-time PCR, gel electrophoresis, restriction fragment length polymorphism and sequencing of specific DNA regions. I tested some plant extracts for potential biological activities through colorimetric assays (DPPH, ABTS) and *in vitro* anti-inflammatory activity on human gastric epithelial cells culture employing different techniques and assays (ELISA assay, transient transfection (calcium phosphate method), nuclear and cytoplasmatic extraction, Bradford protein assay, luminescence assay, cytotoxicity assays (MTT, LDH)). My skills involve the treatment of the obtained experimental data through different statistical analysis: e.g. Anova, Hierarchical Clustering analysis, (HCA) Principal Component Analysis (PCA).
- Driving licence** B

ADDITIONAL INFORMATION

Publications

- [1] **Marengo A.***, Maciel L.S.*, Cagliari C., Rubiolo P., Herodes K. Free Amino Acids and Biogenic Amines Profiling and Variation in Wild and Sub-Endemic Cardueae Species from Sardinia and Corse. *Plants* (2023) 12:319. doi: 10.3390/plants12020319
(* MA and MLS contributed equally to this work)
- [2] Mastellone G., **Marengo A.**, Sgorbini B., Rubiolo P., Cagliari C. Development of a dispersive solid-liquid microextraction method using natural eutectic solvents for a greener extraction of phytochemicals from fiber-type *Cannabis* sp. *Industrial Crops and Products* (2022) 187: 115476. doi:10.1016/j.indcrop.2022.115476
- [3] Bechis G., Mastellone G., **Marengo A.**, Sgorbini B., Cagliari C., Rubiolo P. Hydrophobic Natural Eutectic Solvents for the Gas Chromatographic Determination of Suspected Allergens in Fragrances by Dispersive Liquid-Liquid Microextraction. *Separations* (2022) 9: 318. doi:10.3390/separations9100318
- [4] Cagliari C., Bizzo H., Rubiolo P., **Marengo A.**, Galli S., Anderson J.L., Sgorbini B., Bicchi C. Immobilization of phosphonium-based ionic liquid stationary phases extends their operative range to routine applications in the flavor, fragrance and natural product fields. *Journal of Chromatography A* (2022) 1664: 462796. doi:10.1016/j.chroma.2021.462796
- [5] Mastellone G.*, **Marengo A.***, Sgorbini B., Scaglia F., Capetti F., Gai F., Peiretti P.G., Rubiolo P., Cagliari C. Characterization and Biological Activity of Fiber-Type *Cannabis sativa* L. Aerial Parts at Different Growth Stages. *Plants* (2022) 11: 419. doi:10.3390/plants11030419
(* MG and MA contributed equally to this work)
- [6] Cagliari C., **Marengo A.**, Sgorbini B., Rubiolo P. Green strategies for analysis of natural products. *Green Approaches for Chemical Analysis* (2022) Book Chapter 85 – 125. doi:10.1016/B978-0-12-822234-8.00005-6
- [7] Cagliari C., Bicchi C., **Marengo A.**, Rubiolo P., Sgorbini B. Gas chromatography of essential oil: State-of-the-art, recent advances, and perspectives. *Journal of Separation Science* (2021) 45: 94 – 112. doi:10.1002/jssc.202100681
- [8] Maciel L.S.*, **Marengo A.***, Rubiolo P., Leito I., Herodes K. Derivatization-targeted analysis of amino compounds in plant extracts in neutral loss acquisition mode by liquid chromatography-tandem mass spectrometry. *Journal of Chromatography A* (2021) 1656: 462555. doi:10.1016/j.chroma.2021.462555
(* MLS and MS contributed equally to this work)

- [9] Sanna C.*, **Marengo A.***, Acquadro S., Caredda A., Lai R., Corona A., Tramontano E., Rubiolo P., Esposito F. In vitro anti-HIV-1 reverse transcriptase and integrase properties of *Punica granatum* L. Leaves, bark, and peel extracts and their main compounds. *Plants* (2021) 10: 2124. doi:10.3390/plants10102124 (* SC and MA contributed equally to this work)
- [10] Capetti F.*, **Marengo A.***, Cagliero C., Liberto E., Bicchi C., Rubiolo P., Sgorbini B. Adulteration of essential oils: A multitask issue for quality control. three case studies: *Lavandula angustifolia* mill., *Citrus limon* (L.) osbeck and *Melaleuca alternifolia* (maiden & betche) cheel. *Molecules* (2021) 26:5610. doi: 10.3390/molecules26185610 (* CF and MA contributed equally to this work)
- [11] Mastellone G.*, **Marengo A.***, Sgorbini B., Rubiolo P., Cagliero C. New phases for analytical scale extraction from plants: Current and future trends TrAC - Trends in Analytical Chemistry (2021) 141: 116288. doi: 10.1016/j.trac.2021.116288 (* MG and MA contributed equally to this work)
- [12] Capetti F., Tacchini M., **Marengo A.**, Cagliero C., Bicchi C., Rubiolo P., Sgorbini B. Citral-containing essential oils as potential tyrosinase inhibitors: A bio-guided fractionation approach. *Plants* (2021) 10: 969. doi: 10.3390/plants10050969
- [13] Bressanello D., **Marengo A.**, Cordero C., Strocchi G., Rubiolo P., Pellegrino G., Ruosi M.R., Bicchi C. Chromatographic Fingerprinting Strategy to Delineate Chemical Patterns Correlated to Coffee Odor and Taste Attributes. *Journal of Agricultural and Food Chemistry* (2021) 69: 4550 – 4560. doi: 10.1021/acs.jafc.1c00509
- [14] Guerrini A., Sacchetti G., Guevara M.P.E., Paganetto G., Grandini A., Maresca I., Menghini L., Martino L., **Marengo A.**, Tacchini M. Wild italian *Hyssopus officinalis* subsp. *Aristatus* (godr.) nyman: From morphological and phytochemical evidences to biological activities. *Plants* (2021) 10:631. doi: 10.3390/plants10040631
- [15] Cagliero C., Mastellone G., **Marengo A.**, Bicchi C., Sgorbini B., Rubiolo P. Analytical strategies for in-vivo evaluation of plant volatile emissions - A review. *Analytica Chimica Acta* (2021) 1147:240-258. doi: 10.1016/j.aca.2020.11.029
- [16] Acquadro S., Civra A., Cagliero C., **Marengo A.**, Rittà M., Francese R., Sanna C., Berteà C., Sgorbini B., Lembo D., Donalisio M., Rubiolo P. *Punica granatum* Leaf Ethanolic Extract and Ellagic Acid as Inhibitors of Zika Virus Infection. *Planta Medica* (2020) 86: 1363 – 1374. doi:10.1055/a-1232-5705
- [17] Fontes Vieira R., Bizzo H., **Marengo A.**, Bicchi C., Sgorbini B., Rubiolo P. Volatile profiling of Amicão (*Lychnophora salicifolia* mart.), a wild medicinal species from Brazilian Cerrado. *Plant Biosystems* (2020) 154:1-8. doi:10.1080/11263504.2018.1549612
- [18] Capetti F., Cagliero C., **Marengo A.**, Bicchi C., Rubiolo P., Sgorbini B. Bio-guided fractionation driven by in vitro α -amylase inhibition assays of essential oils bearing specialized metabolites with potential hypoglycemic activity. *Plants* (2020) 9:1-17. doi: 10.3390/plants9091242
- [19] Moglia A., Florio F.E., Iacopino S., Guerrieri A., Milani A.M., Comino C., Barchi L., **Marengo A.**, Cagliero C., Rubiolo P., Toppino L., Rotino G.L., Lanteri S., Bassolino L. Identification of a new R3 MYB type repressor and functional characterization of the members of the MBW transcriptional complex involved in anthocyanin biosynthesis in eggplant (*S. melongena* L.). *Plos One* (2020) 15:6 doi:10.1371/journal.pone.0235081
- [20] Aiello N.*, **Marengo A.***, Scartezzini F., Fusani P., Sgorbini B., Rubiolo P., Cagliero C. Evaluation of the farming potential of *Echinacea angustifolia* DC. accessions grown in Italy by root-marker compound content and morphological trait analyses. *Plants* (2020) 9:873. doi:10.3390/plants9070873 (* AN and AM contributed equally to this work)
- [21] Acquadro S., Appleton S., **Marengo A.**, Bicchi C., Sgorbini B., Mandrone M., Gai F., Peiretti P.G., Cagliero C., Rubiolo P. Grapevine green pruning residues as a promising and sustainable source of bioactive phenolic compounds. *Molecules* (2020) 25:464-483. doi:10.3390/molecules25030464

- [22] Cagliero C., Mazzucotelli M., Rubiolo P., **Marengo A.**, Galli S., Anderson J.L., Sgorbini B., Bicchi C. Can the selectivity of phosphonium based ionic liquids be exploited as stationary phase for routine gas chromatography? A case study: The use of trihexyl(tetradecyl) phosphonium chloride in the flavor, fragrance and natural product fields. *Journal of Chromatography A*. 1619, 460969 (2020) doi:10.1016/j.chroma.2020.460969
- [23] Capetti F., Rubiolo P., Bicchi C., **Marengo A.**, Sgorbini B., Cagliero C. Exploiting the versatility of vacuum-assisted headspace solid-phase microextraction in combination with the selectivity of ionic liquid-based GC stationary phases to discriminate *Boswellia* Spp. resins through their volatile and semivolatile fractions. *Journal of Separation Sciences* (2020) 43:1879-1889. doi: 10.1002/jssc.202000084
- [24] Rittà M.*, **Marengo A.***, Civra A., Lembo D., Cagliero C., Kant K., Lal U.R., Rubiolo P., Ghosh M., Donalio M. Antiviral activity of a *Arisaema tortuosum* leaf extract and some of its constituents against Herpes Simplex Virus type 2. *Planta Medica* (2020) 86:267-275. doi:10.1055/a-1087-8303 (* RM and MA contributed equally to this work)
- [25] Mazzucotelli M., Minteguiaga M.A., Sgorbini B., Sidisky L., **Marengo A.**, Rubiolo P., Bicchi C., Cagliero C. Ionic liquids as water-compatible GC stationary phases for the analysis of fragrances and essential oils: Quantitative GC–MS analysis of officially-regulated allergens in perfumes. *Journal of Chromatography A* (2020) 1610: doi:10.1016/j.chroma.2019.460567
- [26] Negroni M.S., **Marengo A.**, Caruso D., Tayar A., Rubiolo P., Giavarnini F., Persampieri S., Sangiovanni E., Davanzo F., Carugo S., Colombo M.L., Dell'Agli M. A Case Report of accidental intoxication following ingestion of foxglove confused with Borage: high digoxinemia without major complications. *Case Report in Cardiology* (2019) doi:10.1155/2019/9707428
- [27] **Marengo A.**, Emaus M.N., Berteza C.M., Bicchi C., Rubiolo P., Cagliero C., Anderson J.L. *Arabidopsis thaliana* ITS sequence-specific DNA extraction by ion-tagged oligonucleotides coupled with a magnetic ionic liquid. *Analytical and Bioanalytical Chemistry* (2019), 411: 6583-6590. doi: 10.1007/s00216-019-02054-z
- [28] **Marengo A.**, Maxia A., Sanna C., Mandrone M., Berteza C.M., Bicchi C., Sgorbini B., Cagliero C., Rubiolo P. Intra-specific variation in the little-known Mediterranean plant *Ptilostemon casabonae* (L.) Greuter analysed through phytochemical and biomolecular markers. *Phytochemistry* (2019) 161: 21-27. Doi:10.1016/j.phytochem.2019.02.005
- [29] **Marengo A.**, Cagliero C., Sgorbini B., Anderson J.L., Emaus M.N., Bicchi C., Berteza C.M., Rubiolo P. Development of an innovative and sustainable one-step method for rapid plant DNA isolation for targeted PCR using magnetic ionic liquids. *Plant Methods* (2019) 15:23: doi: 10.1186/s13007-019-0408-x
- [30] Mazzucotelli M., Bicchi C., **Marengo A.**, Rubiolo P., Galli S., Anderson J.L., Sgorbini B., Cagliero C. Ionic liquids as stationary phases for gas chromatography—Unusual selectivity of ionic liquids with a phosphonium cation and different anions in the flavor, fragrance and essential oil analyses. *Journal of Chromatography A* (2019) 1583: 124-135. doi: 10.1016/j.chroma.2018.11.032
- [31] Sgorbini B., Cagliero C., Acquadro S., **Marengo A.**, Cordero C., Liberto E., Bicchi C., Rubiolo P. Evaluation of volatile bioactive secondary metabolites transfer from medicinal and aromatic plants to herbal teas: Comparison of different methods for the determination of transfer rate and human intake. *Journal of Chromatography A* (2019) 1594:173-180. doi:10.1016/j.chroma.2019.02.012
- [32] Ballesteros J.L., Tacchini M., Spagnoletti A., Grandini A., Paganetto G., Neri L.M., **Marengo A.**, Angiolella L., Guerrini A., Sacchetti G. Rediscovering medicinal Amazonian aromatic plants: *Piper carpunya* (Piperaceae) essential oil as paradigmatic study. *Evidence-based Complementary and Alternative Medicine* (2019) 2019: doi:10.1155/2019/6194640
- [33] Cagliero C., Guglielmetti A., Cordero C.E.I., Liberto E., **Marengo A.**, Sgorbini B., Rubiolo P., Bicchi C. "Truly Natural": Fully Automated Stir-Bar Sorptive Extraction with Enantioselective GC–MS Quantitation of Chiral Markers of Peach Aroma. *LC GC North America* (2019) 37: 35-42
- [34] **Marengo A.**, Fumagalli M., Sanna C., Maxia A., Piazza S., Cagliero C., Rubiolo P., Sangiovanni E., Dell'Agli M. The hydro-alcoholic extracts of Sardinian wild thistles (*Onopordum* spp.) inhibit TNF α -induced IL-8 secretion and NF- κ B pathway in human gastric epithelial AGS cell. *Journal of Ethnopharmacology* (2018) 210: 469-476. doi: 10.1016/j.jep.2017.09.008

- [35] Vieira R.F., Bizzo H., **Marengo A.**, Bicchi C., Sgorbini B., Rubiolo P. Volatile profiling of Arnicão (*Lychnophora salicifolia* mart.), a wild medicinal species from Brazilian Cerrado. *Plant Biosystems* (2018) 154:1-8 doi: 10.1080/11263504.2018.1549612
- [36] **Marengo A.**, Maxia A, Sanna C, Berteau CM, Bicchi C, Ballero M, Cagliero C, Rubiolo P. Characterization of four wild edible *Carduus* species from the Mediterranean region via phytochemical and biomolecular analyses. *Food Research International* (2017) 100: 822-831. doi: 10.1016/j.foodres.2017.07.071
- [37] **Marengo A.**, Piras A, Falconieri D, Porcedda S, Caboni P, Cortis P, Foddìs C, Loi C, Gonçalves MJ, Salgueiro L, Maxia A. Chemical and biomolecular analyses to discriminate three *taxa* of *Pistacia* genus from Sardinia Island (Italy) and their antifungal activity. *Natural Product Research* (2017) 32:2766-2774. Doi:10.1080/14786419.2017.1378211
- [38] Boggia L, Pignata G, Sgorbini B, Colombo ML, **Marengo A.**, Casale M, Nicola S, Bicchi C, Rubiolo P. *Artemisia umbelliformis* Lam. and Généri Liqueur: Volatile Profile as Diagnostic Marker for Geographic Origin and To Predict Liqueur Safety. *Journal of Agricultural and Food Chemistry* (2017) 65: 2849-2856. doi:10.1021/acs.jafc.6b03394
- [39] Piras A, Marzouki H, Maxia A, **Marengo A.**, Porcedda S, Falconieri D, Gonçalves MJ, Cavaleiro C, Salgueiro L. Chemical characterisation and biological activity of leaf essential oils obtained from *Pistacia terebinthus* growing wild in Tunisia and Sardinia Island. *Natural Product Research* (2017) 31:2684-2689. doi:10.1080/14786419.2017.1289204
- [40] **Marengo A.**, Fenu G., Gennai M., Cogoni D., Fois M., Bacchetta G., *Ptilostemon casabonae* (L.) Greuter, *Informatore Botanico Italiano* (2015) 47:245-289
- [41] Maxia A, Demurtas A, Kasture S, Kasture V, Fadda V, Ventroni G, Maccioni A, **Marengo A.**, Sanna C. Medical Ethnobotany survey of the Senegalese community living in Cagliari (Sardinia, Italy). *Indian Journal of Traditional Knowledge* (2014) 13:275-282

Participation to conferences and summer schools

- 22-24 June 2022 XVII Congress of the Italian Society of Phytochemistry jointly with 3rd International Congress on Edible, Medicinal and Aromatic Plants (ICEMAP 2022), Bari (Italy)
- 5 – 8 Sept. 2021 69th International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research (GA)- Bonn, Germany, Virtual conference
- 6-7 February 2020 Conference of young botanists (CYBO)-Genova (Italy)
- 1-5 September 2019 67th International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research (GA)- Innsbruck (Austria)
- 19-21 June 2019 XVI Congress of the Italian Society of Phytochemistry- Alghero (SS)
- 12-15 March 2019 X International Symposium on Artichoke, Cardoon and their Wild Relatives-Orihuela (Spain)
- 12-15 September 2018 International Plant Science Conference – 113. Congresso della Società Botanica Italiana onlus. Fisciano (SA, Italy)
- 20 November 2017 VI SYRP: S.I.Fit. Young Researchers Project. San Marino
- 20-22 September 2017 International Plant Science Conference – 112. Congresso della Società Botanica Italiana onlus. Parma (Italy)
- 21-23 September 2016 International Plant Science Conference – 111. Congresso della Società Botanica Italiana onlus. Roma (Italy)
- 15 Jan-26 February 2015 Jean Marie Monnet Seminars. Cycle of Seminars in Integration European Issues. University of Cagliari (Italy)
- 2-5 September 2014 International Plant Science Conference – 109. Congresso della Società Botanica Italiana onlus, Firenze (Italy)

16-21 June 2014 5^o PhD. Summer School. Agrobiodiversity of the Mediterranean area: a heritage to rediscover and conserve. Villacidro (Italy)

Scientific communications

22-24 June 2022 **Marengo A.**, Sgorbini B., Cagliero C., Mastellone G., Rubiolo P., *Melissa officinalis* extracts as potential acetylcholinesterase, tyrosinase and elastase inhibitors. XVII Congress of the Italian Society of Phytochemistry jointly with 3rd International Congress on Edible, Medicinal and Aromatic Plants (ICEMAP 2022), Bari (Italy)

9 June 2022 Oral presentation at the Shimadzu workshop "lo stato dell'arte della strumentazione, delle tecniche e delle applicazioni analitiche", Genova (Italy) Presentation title: HPLC-PDA-MS/MS: come sfruttare al meglio le potenzialità di diversi detector per la quantificazione di composti di origine vegetale

5 – 8 Sept. 2021 **Marengo A.**, Maciel LS, Cagliero C., Sgorbini B., Rubiolo P., Herodes K. Derivatization-targeted analysis of amino compounds from Cardueae species by liquid chromatography tandem mass spectrometry. 69th International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research (GA)- Bonn, Germany, Virtual conference

6-7 February 2020 **Marengo A.**, Maxia A., Sanna C., Mandrone M., Berteà C.M., Bicchi C., Sgorbini B., Cagliero C., Rubiolo P. *Ptilostemon casabonae* (L.) Greuter: phytochemical and biomolecular intra-specific variability of a little known endemic Mediterranean plant. Short communication at the conference of young botanists (CYBO), Genova (Italy)

5 November 2019 Oral presentation at the Shimadzu workshop "Applicazioni analitiche ed innovazioni tecnologiche" Torino (Italy) Presentation title: HPLC-PDA-MS/MS: come sfruttare al meglio le potenzialità di diversi detector per la quantificazione di composti di origine vegetale

19-21 June 2019 **Marengo A.**, Maxia A., Sanna C., Mandrone M., Berteà C.M., Bicchi C., Sgorbini B., Cagliero C., Rubiolo P. *Ptilostemon casabonae* (L.) Greuter: chemical and biomolecular analyses of a little-known Mediterranean endemism. XVI Congress of the Italian Society of Phytochemistry- Alghero (SS, Italy)

12-15 March 2019 **Marengo A.**, Sanna C., Maxia A., Berteà C., Fumagalli M., Sangiovanni E., Dell'Agli M., Bicchi C., Cagliero C., Rubiolo P. Phytochemical and biomolecular analyses of wild edible Sardinian thistles and evaluation of their potential anti-inflammatory activity. X International Symposium on Artichoke, Cardoon and their Wild Relatives-Orihuela (Spain)

20 November 2017 **Marengo A.**, Maxia A., Sanna C., Berteà C.M., Gavira C., Bourgaud F., Bicchi C., Ballero M., Cagliero C., Rubiolo P. Investigation of four wild edible *Carduus* species from Sardinia via phytochemical and biomolecular analyses. VI SYRP: S.I.Fit. Young Researchers Project. San Marino

21-23 September 2016 **Marengo A.**, Maccioni A., Maxia A., Berteà C., Cagliero C., Sanna C., Rubiolo P. Phytochemical and biomolecular analyses of four wild edible *Carduus* species from Sardinia. International Plant Science Conference - 111 Congresso della Società Botanica Italiana onlus Roma (Italy)

Grants

December 2022 Grant for Internationalization (GFI) II tornata (University of Torino). Project title: *Achillea erbarotta* subsp. *moschata* (Wulfen) I. Richardson: an alpine endemism for the treatment of skin disorders.

June 2020 Scholarship for researchers, national scholarship programme for international students, researchers and academic staff for the academic year 2020/2021. Archimedes Foundation (Estonia).

June 2019 Zonta grant for the participation to the XVI Congress of the Italian Society of Phytochemistry- (SIF) e ICEMAP 2019 (Alghero, Italy, 19-21 June 2019)

September 2018 Grant for the participation to the 113^o International Plant Science Conference (Fisciano, Italy, 12-15 September 2018)

September 2017 Grant for the participation to the 112^o International Plant Science Conference (Parma, Italy, 20-23 September 2017)

- September 2016 Grant for the participation to the 111°International Plant Science Conference (Roma, Italy, 21-23 September 2016)
- Other experiences**
- 2020-present Scientific collaborations with companies (Indena S.p.A, Silvateam S.p.A., Al.wood di Alasia Corrado, Montenegro S.r.l.) or institutions (Istituto Zooprofilattico Sperimentale del Piemonte, Liguria e Valle d'Aosta) for the chemical characterization of plant extracts.
- 2016-present BSc and MSc thesis direction at the Universities of Cagliari (Department of Life and Environmental Sciences), Milano (Department of Pharmacological and Biomolecular Sciences) and Torino (Department of Drug Science and Technology, Department of Life Sciences and Systems Biology).
- October 2020-March 2021 Course: Percorso IRIDI START per neoassunti (University of Torino, online)
- September 2020 Course: The chemometric school of Genova (University of Genova)
- October 2019 Nomination as "expert in the field of pharmaceutical biology (SSD BIO/15)"
Department of Drug Science and Technology, University of Torino
- September 2016 Course: Safety training: Module II: rischi specifici. Corso di formazione dei lavoratori rischio basso (University of Cagliari)
- July 2016 Course: Safety training: Module I: Formazione generale dei lavoratori (University of Cagliari)
- January-February 2015 Course: Introduction to statistics (University of Cagliari)
- April 2014 Course: Doing Scientific Research: Context and Guidelines (University of Cagliari)
- March-May 2012 Laboratory Assistant
Cellular Biology Laboratory at Cellular and Molecular Biology , University of Torino
Prof.: Michele De Bortoli

