PERSONAL INFORMATION

Martino Forino

University of Naples Federico II
Department of Agricultural Sciences
Via Università 100

+39 081 2532604

forino@unina.it

https://www.docenti.unina.it/martino.forino

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

from 2022 – to date

Full Professor of Organic Chemistry (03/C1 Chim06)
University of Napoli 'Federico II', Italy

from 2014 – to 2022

Associate Professor of Organic Chemistry (03/C1 Chim06)
University of Napoli 'Federico II', Italy

from 2001 to 2014

Permanent Researcher in Organic Chemistry
University of Napoli 'Federico II', Italy

EDUCATION AND TRAINING

1999 — PhD in Natural Substances biologically active (XI ciclo) EQF: 8
University of Napoli 'Federico II', Italy

1995 — Master Degree in Pharmaceutical Chemistry and Technology EQF: 7
University of Napoli 'Federico II'

2000-2001 — 2-year research assignment
University of Napoli 'Federico II'

2004-2005 — 1-year research assignment
Sanford-Burnham Medical Research Institute (La Jolla, San Diego – CA)

PERSONAL SKILLS

Mother tongue — Italian

Other language — English; Advanced proficiency Level (C1)

Job-related skills

Professor Forino has initially focused on the isolation and structural determination of marine biotoxins by means of NMR, MS, and Molecular Modelling techniques. During his stay at the Burnham Institute, San Diego-California, he has worked in the field of drug discovery to identify inhibitors of the lethal factor of anthrax and of some proteins, such as caspases and Akt1, involved in cancer and aging process. This research allowed him to strengthen his expertise in NMR techniques as well as to gain competences in the field of enzymatic assays and Molecular Modelling. As of 2014, he has expanded his scientific interest to the isolation and chemical identification of molecules beneficial to human health from different types of edible and officinal plants. Since 2017, he has been studying the chemical bases of the wine longevity and the bioactive metabolites occurring in grapes and wines. Lately, on account of his competences in chromatography and NMR- and MS-based analysis he has been focusing on the extraction and characterization of bioactive molecules from wastes of the winemaking industrial sector, by means of a Green Chemistry approach in the frame of circular economy. He has gained advanced expertise in extraction of metabolites from organic matrices, in chromatography, and in chemical structure elucidation by mono and bi-dimensional NMR techniques and Mass Spectrometry.

Digital skills

Computer literacy.
Data entry.
Social media.
Web-based communications and research.
Word processing.
Email and chat.

ADDITIONAL INFORMATION

Publications

1. *M. Forino, S. Johnson, D.V. Rozanov, A.Y. Savinov, W. Li, T. Yian, R. Fattorusso, B. Becattini, A. J. Orry, R. A. Abagyan, J. W. Smith, R. C. Liddington, A.Y. Strongin, M. Pellecchia.*
Efficient synthetic inhibitors of Anthrax Lethal Factor.
Proceedings of the National Academy of Sciences 2005, 102 (27), 9499-9504.

2. *P. Ciminiello, C. Dell'Aversano, E. Dello Iacovo, E. Fattorusso, M. Forino, L. Grauso, L. Tartaglione, F. Guerrini, L. Pezzolesi, R. Pistocchi, S. Vanucci.*
Isolation and Structure elucidation of Ovatoxin-a, the major toxin produced by Ostreopsis ovata.
Journal of the American Chemical Society. 2012, 134(3), 1869-1875.

3. *M. Forino, S. Pace, G. Chianese, L. Santagostini, M. Werner, C. Weinigel, S. Rummler, G. Fico, O. Werz, O. Taglialatela-Scafati.*
Humudifucol and Bioactive Prenylated Polyphenols from Hops (Humulus lupulus cv. "Cascade").
J. Nat. Prod. 2016, 79 (3), 590-597.

4. *M. Forino, L. Tartaglione, C. Dell'Aversano, P. Ciminiello.*
NMR-based identification of the phenolic profile of fruits of Lycium barbarum (goji berries). Isolation and structural determination of a novel N-feruloyl tyramine dimer as the most abundant antioxidant polyphenol of goji berries.
Food Chemistry. 2016, 194, 1254-1259.

5. *M. Forino, A. Gambuti, L. Moio*.
NMR-based systematic analysis of bioactive phytochemicals in red wine. First determination of xanthurenic and oleanic acids.
Food Chemistry. 2019, 278, 497-501.

6. *M. Forino, A. Gambuti, P. Luciano, L. Moio.*
Malvidin-3-O-glucoside Chemical Behavior in the Wine pH Range.
Journal of Agricultural and Food Chemistry 2019, 67, 1222-1229.

7. *M. Forino, L. Picariello, A. Rinaldi, L. Moio, A. Gambuti.*
How must pH affects the level of red wine phenols.

LWT - Food Science and Technology 2020, 129, 109546.

8. *M. Forino, C. Cassiano, A. Gambuti, L. Picariello, R. Aversano, C. Villano, B. Basile, L. Moio, L. Frusciante*.
Aging Behavior of Two Red Wines from the PIWI Pathogen-Resistant Grapevines ″ Cabernet Eidos ″ and ″ Merlot Khorus ″
ACS Food Science & Technology 2022, 2, 4, 638–646.

9. *D'Amato, M., Cerulli, A., Errichiello, F., Gambuti, A., Moio, L., Forino, M., Piacente, S.*
Chemical characterization of four ancient white wine grapes (Vitis vinifera L.) from the Amalfi coast.
Food Chemistry Advances, 2023, 2, 100201.

10. *Errichiello, F., D'Amato, M., Gambuti, A., Moio, L., Pastore, A., AL-Hmadi, H., Stornaiuolo, M., Serino, E., Taglialatela-Scafati, O., Forino, M.*
Oleanolic acid: A promising antidiabetic metabolite detected in Aglianico grape pomace.
Journal of Functional Foods, 2023, 104, 105548.

Projects

1) 2021-2023 GAL-Alto Tammaro "SUVAI" (PSR Campania; Misura 19 2014/2020; CUP progetto G82C21000230007): "Recupero di sostanze bioattive da vinaccioli e altri scarti della vinificazione a scopi nutraceutici e cosmetici".

2) 2021-2022 GAL-Terra Protetta "VIBRIS" (PSR Campania; Misura 19 2014/2020; CUP progetto: E51B20001120009): "Vini bianchi a ridotto contenuto di solfiti, longevi e di elevata qualità sensoriale".

3) 2014-2020 PSR Campania- Tipologia Intervento 16.1.1 "Sostegno per costituzione e funzionamento dei GO del PEI in materia di produttività e sostenibilità dell'agricoltura" - Azione 2 "Sostegno ai POI" dal titolo "Modelli sostenibili di coltivazione del vitigno Greco: efficienza d'uso delle risorse ed applicazione di indicatori della 'Footprint family' (48 mesi).

4) 2017 PRIN "Influence of Agro-climatic conditions on the microbiome and genetic expression of grApevines for the Production of red wines: a mulTisciplinary approach (ADAPT)".

5) 2013 Star Linea1 VALTOX Validation of LC-MS/MS for palytoxins, the emerging threat to humans in the Mediterranean Area (24 mesi).

Other Relevant Information

Professor Forino has been tutor of several experimental theses of students enrolled in the master of Science in Enological Sciences focused on the recovery of molecules of enological interest from winery byproducts. In particular, professor Forino is currently tutor of a PhD student in Food Science (XXXVII ciclo) whose research project is " Valorization of winery byproducts by a Green Chemistry approach in the frame of circular economy" (PON "Ricerca e Innovazione" 2014-2020, Asse IV "Istruzione e ricerca per il recupero" con riferimento all'Azione IV.4 "Dottorati e contratti di ricerca su tematiche dell'innovazione" e all'Azione IV.5 "Dottorati su tematiche green". DM 1061/2021.)