Giovanni Appendino

Personal Data

Born at Carmagnola (TO) on September 1, 1955

Bio and education

1974. Maturità classica (Liceo G. Baldessano, Carmagnola)
1979. Laurea in Chimica e Tecnologia Farmaceutiche (Torino University)
1980. Laurea in Farmacia (Torino University)
1985. Visiting Professor at the Laboratory of Organic Synthesis, University of Gent (Belgium)

University career

2000-	Full Professor, Università del Piemonte Orientale
1998-2000	Associated Professor, Torino University
1983-1998	Lecturer, Torino University

Scientific positions

2008-	Editor of *Fitoterapia* (Elsevier)
2013-	Advisory Board member of *Phytochemistry Letters* (Elsevier and Phytochemical Society of Europe) Advisory Board member of *PharmaNutrition* (Elsevier)
2014-	Advisory Board member of *Natural Products Reports* (Royal Society of Chemistry)
2015-	Advisory Board member of *Progress in the Chemistry of Organic Natural Products* (Springer-Nature)
2016-	Member of the Accademia di Agricoltura di Torino Advisory Board member of *Acta Pharmaceutica Sinica* (Elsevier)

MAIN FIELDS OF INTEREST

1. Organic Chemistry
2. Natural Products
3. Isoprenoids
4. Organic Synthesis
5. Cannabinoids

CURRENT ISSUES OF RESEARCH

1. Isoprenoids chemistry

Study of the reactivity and synthesis of isoprenoids (mono-, sesqui-, di-, triterpeni) of biomedical relevance and study of the structure-reactivity relationships of organic compounds

2. Lipidomics

Identification, synthesis and chemical modification of bioactive endolipids (endocannabinoids, endovanilloids, eicosanoids) of relevance for drug discovery and of their exogenous modulators (cannabinoids, vanilloids)

3. Anticancer and antiviral chemotherapy

Synthesis of modulators of biological end-points of relevance for cancer research (serine/threonine kinases, tyrosine kynases, tubulin, PgP, NF-κB) and for the delatentization of the HIV virus

4. Sensory chemoreception

Synthesis of molecular probes to explore various classes of chemesthetic receptors (TRPV1-4, TRPM8, TREPA1) and of bitter receptors (hTAS2R), and their biomedical application. Isolation of novel chemesthetic ligands from spices and aromatic plants

5. Bioprospecting

Study of secondary metabolites from medicinal plants and from plants if agricultural and industrial relevance, in particular on cannabis and plants typical of niche environments (islands, mountains)

CURRENT FUNDED PROJECTS

BANDO	TITOLO DEL PROGETTO
7th Framework Program (2014-2018)	TRIFORC – A pipeline for the discovery, sustainable production and commercial utilisation of known and novel high-value triterpenes with new or superior biological activities http://triforc.eu/

TOP FIVE PAPERS

1. Appendino, G.; Gariboldi, P.; Nano, G.M:, Tétényi, P. Tetrahydrofuran-Type Terpenoids from *Tanacetum vulgare*. *Phytochemistry* **1984**, *23*, 2545-2551
2. Appendino, G.; Gariboldi, P.; Gabetta, B.; Pace, R.; Bombardelli, E.; Viterbo, D. 14β-Hydroxy-10-Deacetylbaccatin III, a New Taxane from Himalayan Yew (*Taxus wallichiana* Zucc.). *J. Chem. Soc., Perkin Trans. I* **1992**, 2925-2929
3. Nuyttens, F.; Hoflack, J.; Appendino, G.; De Clercq, P. J. Intramolecular Diels-Alder Reaction with Furan-Diene: Synthesis of Gibberellins (+)-GA_1 and (+)-GA_3 *Synlett*, **1995**, 105-107
4. Casiraghi, G.; Zanardi, F.; Appendino, G.; Rassu, G. The Vinylogous Aldol Reaction; A Valuable, yet Understated Carbon-Carbon Bond-Forming Reaction. *Chem. Rev.* **2000**, *100*, 1929-1972.
5. Avonto, C.; Taglialatela-Scafati, O.; Pollastro, F.; Minassi, A.; Di Marzo, V.; De Petrocellis, L.; Appendino, G. An NMR Spectroscopic Method to Identify and Classify Thiol-Trapping Agents: Revival of Michael Acceptors for Drug Discovery? *Angew. Chem. Int. Ed.* **2011**, *50*, 467-471

AWARDS

1. Brucker Award of the Phytochemical Society of Europe (2014)
2. Medaglia Quilico of the Società Chimica Italiana (2009)
3. Rhone-Poulenc Rorer Award of the Phytochemical Society of Europe (1991)