



GIOVANNI APPENDINO

Born 01-09-1955. Degree in Pharmaceutical Chemistry and Technology (with Distinction) at the University of Torino in 1979 (mentor Prof. Gianmario Nano). Post-Laurea work in 1985 at the Laboratory of Organic Synthesis, University of Gent (Belgium) with Prof. Pierre De Clercq (synthesis of gibberellic acids).

Academic positions

2000-present: Full Professor of Organic Chemistry (University of Eastern Piedmont, Novara)

1998-2000: Associate Professor of Organic Chemistry (University of Torino)

1982-1998: Assistant Professor of Organic Chemistry (University of Torino)

Teaching Activity

Courses of Basic Organic Chemistry, Advanced Organic Chemistry, Heterocyclic Chemistry, Natural Products Chemistry, Organic Chemistry Laboratory, Process Developments.

Member of the Teaching Board of the PhD ChemBio of the University of Eastern Piedmont

Supervisor of 10 PhD students, 5 post-doc and over 100 undergraduate students.

Co-author of the Textbook: Chimica Organica (Edi-ermes), now at the 2nd edition (2017) and La Chimica Organica in Laboratorio (Piccin, 2002)

Coordination of International and National Scientific Projects:

5 EU Projects

5 National (COFIN) Projects

Scientific Activity

The research activity of Giovanni Appendino takes inspiration from natural products to address problems in various realms of organic chemistry (exploration of the natural product chemical space, reaction mechanisms, new synthetic methods), interfacing them with biomedical research in pharmacology (new drug leads), physiology (chemosensation), and cell biology (novel mechanisms of activity). Two main branches of acquisition of chemical diversity have been pursued, namely chemodiversity from biodiversity (over 200 new compounds isolated and structurally elucidated), and chemodiversity from ingenuity (total synthesis, modification of natural products leads, novel reactions and reactivity profiles). Within the natural products investigated, four classes have received particular attention: cannabinoids, taxoids, phorboids, and medium-sized cyclic isoprenoids.

These studies have resulted in the discovery of a clinical candidate currently under development with orphan drug status in EU and USA (the cannabinoquinoid VCE-004), a pre-clinical candidate (the seco-taxane IDN5109, development dropped in 2005), and five compounds currently commercialized as biochemical probes (the NF-KB inhibitor arzanol, the estrogen mimic ferutinin, the vitamin K epoxide reductase inhibitor ferulenol, the rTRPV1 selective agonist PPAHV, the TRPA1 agonist umbellulone). Both IDN5109 and VCE-004 were synthesized using original chemistry.

Author of 372 peer-reviewed articles (Scopus)*, 15 book chapters and 32 patents (Scopus)* on the chemistry and bioactivity of natural products. Invited speaker for plenary and/or

keynote lectures at 55 International Conferences.

Bibliometric data:

Number of peer-reviewed articles: 434 (SciFinder)*

Citations: 10 375 (Scopus)*

H-index: 50 (Scopus)*

*Accessed on March 8, 2018

Web site: <http://www.nonapcg.it/#banner>

Editorial Duties

Editor-in-Chief of the journal *Fitoterapia*. Editorial Board member of the journals *Natural Products Reports (RSC)*, *Acta Pharmaceutica Sinica B (Elsevier)*, *PharmaNutrition (Elsevier)*, *Natural Products Research (Taylor & Francis)* and the book series *Progress in the Chemistry of Organic Natural Products (Springer-Nature)*.

Past Editorial Board member of *European Journal of Organic Chemistry (Wiley)* and *The Journal of Natural Products (ACS)*.

Awards

1991: Rhône-Poulenc Rorer Award of the Phytochemical Society of Europe (Studies on the chemistry of medium-sized cyclic isoprenoids)

2009: Medaglia Quilico of the Società Chimica Italiana (Studies on natural products and their industrial exploitation)

2014: Bruker Prize of the Phytochemical Society of Europe (studies on bioactive isoprenoids)