GIOVANNI APPENDINO

Born in Carmagnola (TO), September 1, 1955 and graduated at the University of Torino in 1979. University Lecturer in 1983 (University of Torino); Associated Professor in 1998 (University of Torino); Full Professor from 2000 to present at the Università del Piemonte Orientale, Faculty of Pharmacy. Visiting scientist at the University of Gent (Belgium) in 1985 (Laboratory of Organic Synthesis).

- Editor in Chief of the Journal Fitoterapia and member of the Advisory Board of *European Journal of Organic Chemistry, Planta Medica*, *Journal of Natural Products*, *The Open Natural Products Journal* and *Natural Products Communications.*
- Board member of Società Italiana di Fitochimica and Società Italiana di Fitoterapia.
- Associated Foreign Member of the Institute of Chemical Biology and Drug Discovery, State University of New York at Stony Brook. Corresponding member of the Accademia di Agricoltura di Torino (Italy). Contract Professor at the Università di Scienze Gastronomiche (Pollenzo, Italy).
- Member of American Chemical Society, Phytochemical Society of Europe, International Cannabinoids Research Society, Società Chimica Italiana, Società Italiana di Fitochimica, Società Italiana di Fitoterapia.

The research activity of Prof. Appendino takes inspiration from natural products to solve problems in organic chemistry (new synthetic methodologies), cell biology (novel mechanisms of activity), and medicine (new drug leads). The following lines of research are currently pursued:

Brain lipidomics: identification, synthesis and chemical modification of bioactive endolipids (endocannabinoids, endovanilloids, endogenous eicosanoids) and their natural products mimics (cannabinoids, capsaicinoids)

Sensory chemoreception: Synthesis of molecular probes to explore various classes of TRP- (TRPV1, TRPM8, TRPA1, TRPV4) and bitter (hTAS2R family) receptors, and their pharmacological exploitation.

Anticancer and antiviral chemotherapy: Synthesis of molecules aimed at various oncological end-points (tubulin, PgP, NF-□B, PKC) and at achieving HIV de-latentization (prostratinoids).

Non-steroid hormonal agents: Identification of non-steroid natural products interacting with estrogen- and progesterone receptors, and exploitation of their biomedical potential.

Synthetic methodologies: chemoselective modification of polyfunctional compounds (polyphenolics, phenolic alcohols, phenolic amines). Development of new protocols of functional group modification.

Bioprospecting: secondary metabolites from niche area (Sardinia, Madagascar) and from medicinal plants.

Secondary metabolites from edible plants and spices: identification of neutraceutical agents from local food plants.

Prof. Appendino has published over 300 peer-reviewed articles and 10 book chapters on the chemistry and bioactivity of natural products, and has given lectures at prestigious European and American institutions, including the Ischia Advanced School of Organic Chemistry, the Stanford University, and the Scripps Research Institute of San Diego. His distinctions include the Rhône-Poulenc Rorer Award of the Phytochemical Society of Europe for his studies on terpenoids. Prof. Appendino has acted as local coordinator of four EU research project centered on natural products, and several national programs on bioactive natural products.

Since 2006 Prof. Appendino is Chief Scientific Adviser of Indena S.p.A. (Milano, Italy).