Daniela Imperio

PERSONAL DATA

Born in Biella on 11/06/1982, resident in Gattinara (VC).

CURRICULUM VITAE ET STUDIORUM

After obtaining the diploma of high school A. Avogadro di Cossato (Bi) (score 100/100), she began her university studies in Medicinal Chemistry at the Faculty of Pharmacy of the University of Eastern Piedmont.

She graduated in March 2007 with 100/110 *magna cum laude* with a thesis in Medicinal Chemistry under the supervision of Prof. Gian Cesare Tron.

In 2011 she obtained the title of PhD in Pharmaceutical and Food Biotechnology under the supervision of Professor Giovenzana G.B. As part of his doctoral program, from April 2009 to September 2009 she worked at the laboratories of Prof. Parker David at the Department of Chemistry, Durham University, UK.

In her experience as an organic chemist, she carried out research activities for two years at Bracco Imaging Spa, as a Researcher in Chemical Research and Development.

Since 2016 she has been a Post-Doc researcher at the Laboratory of Organic Chemistry of Professor Panza L. (DSF UNIUPO).

She is the author of 21 scientific articles and 1 patent, in the fields of medicinal and organic chemistry.

University Career	
2019-present	Adjunct Professor of Organic Chemistry
2016-present	Post-doc Researcher, DSF- UNIUPO
2007-2010	PhD, DSF- UNIUPO

RESEARCH INVESTIGATION FIELDS

1. Organic synthesis
2. Carbohydrates and glycoconjugates
3. Immunomodulator compounds
4. Boron neutron capture therapy (BNCT)
5. Boronate sugars

CURRENT RESEARCH TOPICS

1. Synthesis of oligosaccharides of biological interest, immunogenic glycolipids presented by "antigen-presenting molecules", synthetic vaccines.
2. New glycosylation strategies.
3. Synthesis of sugar analogues.
4. Synthesis of sugar analogues containing boron atoms for neutron capture anticancer therapy capable of accumulating in cancer cells with different strategies including the use of nanotechnologies and theranostic agents.

TOP FIVE PAPERS:

1. Imperio D, Campo F, Panza L. "Exploring glycosyl sulphates as donors for chemical glycosylation. *Org Biomol Chem*. **2021**, *19*, 4930-4936
2. L. Panza, F. Compostella, D. Imperio "A versatile synthesis of αGalCer and its analogues exploiting a cyclic carbonate as phytosphingosine 3,4-diol protecting group" *Carbohydr. Res.* **2019**, *472*, 50-57
3. D. Imperio, E. Del Grosso, S. Fallarini, G. Lombardi and L. Panza "Synthesis of Sugar-Boronic-Acid Derivatives. A Class of Potential Agents for Boron Neutron Capture Therapy" *Org. Lett.* **2017**, *19*, 1678–1681
4. D. Imperio, G.B. Giovenzana, G. Law, D. Parker, J. Walton "Synthesis and comparative anion profiles of two di-aqua Eu(III) complexes", *Dalton trans*. **2010**, *39*, 9897-903
5. D. Imperio, T. Pirali, U. Galli, F. Pagliai, L. Cafici, P. Canonico, G. Sorba, A. Genazzani, G.C. Tron "Replacement of the lactone moiety on podophyllotoxin and steganacin analogues with a 1,5-disubstituted 1,2,3-triazole via ruthenium-catalyzed click chemistry" *Bioorganic & Medicinal Chemistry* **2007**, *15*, 6748-6757