

Daniela Imperio

PERSONAL DATA

Born in Biella, Italy, on June 11, 1982

CURRICULUM VITAE ET STUDIORUM

Daniela Imperio graduated in Pharmaceutical Chemistry and Technology (110/110 *cum laude*) in 2007 at the University of Eastern Piedmont (Novara). In 2011 she obtained her PhD in Pharmaceutical and Food Biotechnology under the supervision of Professor Giovenzana G.B. As part of her PhD program, from April 2009 to September 2009 she worked in the laboratories of Prof. David Parker at the Department of Chemistry, Durham University, UK. In her experience as an organic chemist, she carried out research activities in the pharmaceutical industry for two years 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 33 publications, patents, and a book chapter in the fields of pharmaceutical and organic chemistry.

UNIVERSITY CAREER	
2019-present	Lecturer of organic chemistry
2016-present	Post-doc, DSF- UNIUPO
2007-2010	PhD student, DSF- UNIUPO

FIELDS OF RESEARCH INVESTIGATION

- Organic synthesis and organocatalysis
- Carbohydrates and glycoconjugates
- Boron Neutron Capture Therapy
- Boronic sugar derivatives
- Compounds with immunomodulatory properties

CURRENT RESEARCH TOPICS

1. Synthesis of oligosaccharides of biological interest, immunogenic glycolipids, synthetic vaccines
2. Novel methods for glycosylation reactions
3. Synthesis of organocatalysts for asymmetric epoxidation
4. Synthesis of sugar analogs containing boron atoms for neutron capture antitumor therapy able to accumulate in cancer cells with different strategies including the use of nanotechnologies and theranostics.

THE FIVE MOST SIGNIFICANT PUBLICATIONS OF HER CAREER

1. Imperio D, Casali E, Del Grosso E, Caprioglio D, Minassi A, Panza L. "Trifluoromethyl Ketone Galactose Catalyst for Asymmetric Epoxidation: Experimental and Theoretical Model". *EurJOC*, **2024**, 27, e202301163
2. Confalonieri L, Imperio D, Erhard A, Fallarini S, Compostella F, Del Grosso E, Balcerzyk M, Panza L. "Organotrifluoroborate Sugar Conjugates for a Guided Boron Neutron Capture Therapy: From Synthesis to Positron Emission Tomography". *ACS Omega*, **2022**, 7(51), 48340-48348
3. Imperio D, Campo F, Panza L. "Exploring glycosyl sulphates as donors for chemical glycosylation" *Org Biomol Chem*. **2021**, 19, 4930-4936
4. Panza L, Compostella F, Imperio D. "A versatile synthesis of α GalCer and its analogues exploiting a cyclic carbonate as phytosphingosine 3,4-diol protecting group" *Carbohydr. Res.* **2019**, 472, 50-57
5. Imperio D, Del Grosso E, Fallarini S, Lombardi G, Panza L. "Synthesis of Sugar-Boronic-Acid Derivatives. A Class of Potential Agents for Boron Neutron Capture Therapy" *Org. Lett.* **2017**, 19,