

Education:

1974-1979: Student in Biological Sciences at the University of Bologna;
1979: Honors degree in Biological Sciences

Career

1982-1992: Technical Assistant and then Graduate Technician at the Institute of General Pathology, then Department of Experimental Pathology, of the University of Bologna;
1992-now: Associate Professor at the Department of Experimental, Diagnostic and Specialty Medicine (DIMES), School of Medicine and Surgery of the University of Bologna.

Periods abroad

1986: Short Term Fellowship of the European Molecular Biology Organization (EMBO) at the Department of Medical Chemistry of the Vrije Universiteit in Amsterdam.

1994: Visiting Scientist at the Department of Molecular and Cellular Biology of the Roswell Park Cancer Institute of Buffalo, NY, funded by the USA / Italy Cancer Program.

1995: Visiting Scientist at the Department of Molecular and Cellular Biology of the Roswell Park Cancer Institute of Buffalo, NY, funded by a "Luisa Santunione" scholarship from the Italian Cancer Research Foundation.

Scientific interests:

Research deals with the alterations of membrane glycosylation in pathological conditions and their functional significance. In particular:

- 1) the molecular mechanisms that lead to an altered expression of glycosyltransferases in cancers and the consequences of these alterations on the transcriptome and the phenotype of the neoplastic cell. The experimental model for these studies consists of human cell lines, mainly derived from colon and bladder tumors, genetically modified by insertion of glycosyltransferase genes.
- 2) the alterations of the glycosylation processes in aging.

Scientific activity

- Author of over 90 papers published in international journals registered by PubMed.
- Carries out referee activities for various international journals, including: International Journal of Cancer; Glycobiology, Gene; Gynecologic oncology; Clinical & Experimental Metastasis; Biochimica et Biophysica Acta; BMC Cancer, International Journal of Biochemistry and Cell Biology, Oncotarget, FASEB J.
- He has served as referee for: Israel Science Foundation; Fundacao para Ciencia e Tecnologia (Portugal); Dutch Cancer Society (Holland) and the University of Milan.
- He was a member of the committee for the evaluation of the "former 60%" projects of the University of Bologna in the period 2003-2007.
- He is a member of the Teaching Board of the PhD School of Oncology, Hematology and Pathology of the University of Bologna.
- He was partner of a PhD co-supervision agreement stipulated between the University of Bologna and the Universidade Nova of Lisbon.
- He has held invited seminars at the Department of Molecular and Cell Biology of the Roswell Park Cancer Institute in Buffalo, NY, the Hospital for Sick Children in Toronto, Canada, the Department of Immunology of the Universidade Nova in Lisbon.
- He is a member of the Italian Society of Pathology, of the Association of Cell Biology of Differentiation (ABCD) and of the Society for Glycobiology.
- He was a Principal Investigator of the "Consortium for Functional Glycomics" (www.functionalglycomics.org)

Research grants

- Since 1994 he has continuously received "former 60%" grants.
- In the three-year period 1994-1996 he was responsible for the Research Unit of the "former 40%" project "Biology and pathology of the cell life cycle: cell proliferation, survival and death" (National Coordinator Prof. G. Guidotti, University of Parma).
- In 1998-2000 he participated in the "Research Program of Relevant National Interest" (PRIN) "Mechanisms and markers of transformation and neoplastic progression", (National Coordinator Prof. Guido Paolucci, University of Bologna)
- In the period 2001-2003 he was responsible of a Research Unit in the "Research Program of Relevant National Interest" (PRIN) "Profile of the gene expression of metastatic colorectal cancer for the identification of predictive factors of response to treatment" (National Coordinator Prof. Mario Lise, University of Padua).

- In the period 2004-2006 he was responsible of a Research Unit in the "Research Program of Relevant National Interest" (PRIN) "Identification and characterization of genes associated with metastatic progression in the colorectal cancer as predictive factors for therapeutic response "(National Coordinator Prof. Mario Lise, University of Padua).
- In the period 2010-2014 he received funding from the Portuguese Science and Technology Foundation to support the research activity of a Portuguese doctorate.
- In 2015-2019 obtained European funding within the Marie Skłodowska Curie "GlyCoCan" project.

Editorial committees

He is a member of the "Editorial boards" of:

- Glycobiology
- World Journal of Gastrointestinal pathophysiology
- Frontiers in Endocrinology
- International Journal of Molecular Sciences

Teaching activity

He is teacher in the following courses in the Medicine and Surgery School of the University of Bologna:

- Immunology
- Molecular Pathology
- General Pathology and Pathophysiology

PhD School

He is a member of the Academic Board of the Doctorate in Oncology, Hematology and Pathology of the University of Bologna.