

**Prof. FRANCESCO NICOTRA.**

**Career and International appointments**

2021- Emeritus Professor

2018-2019 **President of the IUPAC Division of Organic and Biomolecular Chemistry**

2016-2019 **Scientific Director** of the Foundation European Centre for Nanomedicine (CEN)

2013-2018 Member of the **Board of Directors** of the University of Milano-Bicocca

2009-2012 **Dean** of the Faculty of Sciences at the University of Milano-Bicocca

2006-2015 **Chairman del subcommittee of Biotechnology of IUPAC**

2002-2008 **Head of the Departemt** of Biotechnology and Biosciences, University of Milano-Bicocca

2002- **Italian representative in the International Carbohydrate Organisation and in the European Carbohydrate Organisation**

2000 **Full professor of Organic Chemistry**, University of Milano-Bicocca

1987 Associated professor, University of Milano

1985 Postdoctoral research associate, Prof. Pierre Sinay at University of Orleans

1981 Assistant professor, University of Milano

1973 Laurea "*cum lode*" University of Catania



**Award** for innovation in research of the Italian Chemical Society, 2011

**Medal Berti** for Research in Carbohydrate Chemistry, 2012

**Medal Quilico** of the Division of Organic Chemistry of the Italian Chemical Society, 2015

**Co-founder of the spin-off company Amyppharma srl** <https://www.amypopharma.com/en>

**Scientific advisor and partner of Biocompatibility Innovation srt** <https://www.biocompatibility.bio/>

**Scientific interests**

Design, synthesis, characterisation and exploitation of organic compounds of biological and pharmaceutical relevance. Recent studies are devoted to the valorisation on bioactive molecules, in particular carbohydrates, in nanomedicine.

**Scientific production**

>200 publications on international scientific journals with IF, 22 chapter of books, 12 patents, H index 43 (Google Scholar), 37 (Scopus).

**Editor** of Current Trends in Organic Synthesis, Kluwer Academic/Plenum Publisher, New York, 1999; Pure and Applied Chemistry, 2008; "Organic and Biomolecular Chemistry", the **UNESCO** Universal Enciclopedia (EOLSS) [www.eolss.net](http://www.eolss.net)

**Coordinator of National/International projects:**

HORIZON 2020 MSCA-ITN-2014 NABBA (01/01/2015-28/02/2019), *Design and development of advanced Nanomedicines to overcome Biological Barriers and to treat severe diseases*. 2.997.315,36 Euro

FP7-PEOPLE-2013-IOF-627403 3D Biomimetics, (01/03/2014-31/08/2016), *Scaffold Based Supramolecular Architectures as Protein Epitope Mimetics for Biomedical Applications* 218.349,30 Euro

MIUR, PRIN 2011, *Innovative chemical methodologies for smart biomaterials*, 825.626 Euro

MIUR, PRIN 2008, *LPS Antagonists and Inhibitors of its Biosynthesis: design, synthesis and bioassays*

REGIONE LOMBARDIA, 2010 "Network Enabled Drug Design" NEDD

CARIPLO, 2008/3175, "development of NMR techniques for tissue engineering studies"

FP5, Eurocarb

**Group leader of National/International projects**

Regione Lombardia. 2019, IMMUN-HUB, (01/11/2019-30/4/2022), *Sviluppo di nuove molecole di seconda generazione per immunoterapia oncologica*, 1.200.000 Euro UNIMIB,

Ministero della Salute, RF-2016-02362946 (1/3/2018-28/2/2021) Theoryenhancing Projects. Title: *Dissecting the link between pulmonary stromal changes and lung cancer progression for biomarkers discovery and therapeutic intervention*  
H2020-NMBP-15-2017- GA-760986, iNanoBIT (01/10/2017-31/09/2022), *Integration of Nano- and Biotechnology for beta-cell and islet Transplantation*. 652.563,75 Euro UNIMIB

FP7/2007-2013 n° 212043. NAD, *Nanoparticles for therapy and diagnosis of alzheimer disease*

FP5 Marie Curie HPRN-CT-2002-00173, *New carbohydrate Derived Scaffolds for the Generation of Bioactive Libraries*  
COST, *Glycolipid Mimics Against Sepsis*  
COST BM1003, *"Microbial cell surface determinants of virulence as targets for new therapeutics in Cystic Fibrosis*  
REGIONE LOMBARDIA, 2006, *PANDA*  
MIUR, PRIN 2005, n.2005037725  
MIUR, FIRB 2006/ RBIP068JL9, *Materiali innovative per lo sviluppo di Bioprotesi articolari*  
INTERREG III, 2006, *BIOCAT*

#### **Chair/Co-Chair of International Conferences**

1<sup>st</sup> Euroconference on Carbohydrates in Drug Research, Stintino, September 1999 (Chair)  
2<sup>nd</sup> Euroconference on Carbohydrates in Drug Research, Sintra, Portugal, September 2000 (Chair)  
CHEMBIOTECH2007 at 41st IUPAC World Chemistry Congress, Torino August 2007 (Chair)  
13<sup>th</sup> International Biotechnology Symposium, Dalian, China, October, 2008 (Co-Chair)  
14<sup>th</sup> International Biotechnology Symposium, Rimini, September 2010 (Co-Chair)  
15<sup>th</sup> European, Carbohydrate Symposium, Sorrento, July 2011 (Co-Chair)  
16<sup>th</sup> International Biotechnology Symposium, Forteleza, Brazil, 14-19 September 2014 (Co-Chair)  
29<sup>th</sup> International Carbohydrate Symposium (ICS 2018), Lisboa, Portugal, July, 2018 (Co-Chair)  
NanoMed 2018 Venice Italy October 2018 (Chair)  
31<sup>a</sup> International Symposium on the Chemistry of Natural Products, Napoli, October 2023 (co-Chair)

#### **Member of International Conference Committees & Advisory Board**

XVII International Carbohydrate Symposium, Milano, July 1996  
XII International Conference on Organic Synthesis, Venice, June 1998  
11<sup>th</sup> European, Carbohydrate Symposium, Lisbon, September 2001  
12<sup>th</sup> European, Carbohydrate Symposium, Grenoble, July 2003  
13<sup>th</sup> European, Carbohydrate Symposium, August 2005  
XVIII International Symposium on Glycoconjugates, Firenze, September 2005  
16th International Conference on Organic Synthesis, Merida June 2006  
14th European Carbohydrate Symposium Lübeck, Germany, September, 2007  
Carbohydrates as Organic Row materials V, Lisbon. January 20-23, 2009  
14<sup>th</sup> European, Carbohydrate Symposium, Wien, July 2009  
18th International Conference on Organic Synthesis, Bengen, August 2010  
26<sup>th</sup> International Carbohydrate Symposium, Madrid, July 2012  
16<sup>th</sup> European Carbohydrate Symposium, Tel Aviv, July 2013  
17<sup>th</sup> International Biotechnology Symposium, Melbourne, Australia, October 2016  
22<sup>nd</sup> International Conference on Organic Synthesis, Firenze, September 16-21, 2018  
30th International Symposium on the Chemistry of Natural Products, November 25-29, 2018  
25 International Symposium on Glycoconjugates, Milano, August 25-31, 2019  
12<sup>th</sup> International Symposium on Bioorganic Chemistry (ISBOC-12), Shenzhen, China, December 15-18<sup>th</sup>, 2019

#### **Evaluator of projects for:**

European Community, FP5, FP6, FP7, COST, Horizon2020; European Research Council; European Science Foundation; Swiss Council; Austrian Science Found (FWF); French National Research Agency (ANR); ISERM (France); Fondation Recherche Medicale (France); Netherlands Organisation for Scientific Research (NWO); Portuguese Foundation for Science and Technology (FCT); Czech Republic (GACR); SoMoPro (South Moravian Programme); Polish National Research Centre; Romanian Government (UEFISCDI); Croatian Agency for Science, La Caixa Foundation; Ireland Curam MedTrain; Regione Emilia Romagna; Regione Piemonte; Provincia autonoma di Trento. University of Milano, Firenze, Padova, Verona; Caroplo Foundation.

#### **Member of Doctorate Commissions**

- Doctorate of Daniela Fattori, University of Lausanne, 1991
- Abilitation of Dr. Juean Xie, University Paris VI, 1997
- Doctorate of Francesco Peri, University of Lausanne, 1999
- Abilitation of Dr. Claude Taillefumier University of Nancy,
- Evaluation of the CNRS Centre "CERMAV", Grenoble,

- Abilitation of Dr Tanja Wroddnig, Technical University of Graz, 2006
- Doctorate of Omar Boutoureira, Universidad Rovira i Virgili, Spain, 2007
- Doctorate of Alexander Titz, University of Basel, 2008
- Doctorate of Iolanda Martin, University of Tarragona, 2012
- Doctorate of Francisco Ribeiro Cardona, University of Aveiro, 2013
- Associated Professor for Micha Fridman at the University of TelAviv, 2015
- Doctorate of martina Tuttolomondo, University of Odense, 2017
- Doctorate Daniele Vinciguerra, Università Paris Saclay, 2018

#### **Plenary or Keynote lecturer in international conferences/schools**

IX Corso Estivo "A. Corbella", Gargnano, 18-22 June 1984  
 II Convegno sulla Chimica dei Carboidrati, 29-30 April 1988  
 Struttura e reattività di molecole di interesse biologico e loro modelli, Montecatini, 22-26/10 1990  
 XV Corso Estivo "A. Corbella", Gargnano, 18-22 June 1990  
 XVI International Carbohydrate symposium, Paris, 5-10 July 1992  
 XXI Convegno Nazionale della Divisione di Chimica Organica, Terrasini, 29-Sett-2-October 1993.  
 First Euroconference on Carbohydrate Mimics, Strasburg, May 15-18, 1995  
 Convegno Nazionale su orientamenti e metodologie in chimica farmaceutica, organica e bioorganica, Numana, 2-6 June 1995  
 XIX Congresso Nazionale Ricerca e Tecnologia, Riccione, 9-14 June 1996  
 Glucoportwo, Porto, September 21-25, 1997  
 Second International Meeting of the Portugese Carbohydrate Chemistry Group, Oporto, 21-25 September 1997  
 215th American Chemical Society National Meeting, Dallas, March 29-April 2, 1998  
 Fourteenth New Orleans Carbohydrate Symposium, New Orleans, April 2-4, 1998  
 10th European Carbohydrate Symphosium, Galway, July 11-16, 1999  
 219th American Chemical Society National Meeting, San Francisco, March 26-30, 2000.  
 VII Convegno sulla Chimica dei Carboidrati, Napoli, 19-21 June 2000  
 3rd Spanish-Italian Symposium on Organic Chemistry (SISOC-3) Benalmadena, September 2000.  
 10th Bratislava Symposium on saccharides, September 1-6, 2002 Smolenice  
 10th Ischia Advanced School of Organic Chemistry, Ischia September 21-26, 2002  
 Third Italian-French Meeting on Organic Chemistry, Pisa, November 20-23, 2002  
 International Symposium on Modern Aspects of Sugar Chemistry, Warsaw September 29, 2003  
 Gluport5, Covilha, September 7-10, 2003  
 From Chemistry to technology, Belvedere di San Leucio, Caserta 11-13 November 2004  
 Sugar in the synthesis of natural products, Paszkowka 8-13 June 2005  
 Eurocarb 13, Bratislava, August 2005  
 XXII Europeam Colloquium on Heterocyclic Chemistry, Bari 2-6 September 2006  
 233 ACS National Meeting, Chicago, March 25-29, 2007  
 3rd ERA Chemistry "Flash" Conference, Killarny, March 9-13, 2008  
 IBS2008 International Biotechnology Symposium, Dalian, China, October 12-19, 2008  
 New Trends in Organic Synthesis, Milano, November 24, 2008  
 ESMEC-European School of Medicinal Chemistry-Urbino. September 13-18, 2009  
 Workshop "Glycoscience: tools and molecules", Milano 15-16 December 2010  
 GAFHI 2011, May 26-29, 2011, Goslar, Germany  
 ESF-COST High-Level Research Conference: Natural Products: chemistry, Biology and Medicine IV, Maratea, 28 August-2 September 2011  
 XXIV Congresso della Società Chimica italiana Lecce 11-16 September 2011  
 DCSB 2012, Napoli September 24-25 2012,  
 Nanoparticles and Nanotechnologies in Biomedicine, Bresso, 19-21 June 2013,  
 6th Central Europe Conference, Chemistry towards Biology 2013, Trieste, 10-13 September 2013  
 27th International Carbohydrate Symposium, Bangalore, 12-18 January 2014  
 Frontiers in chemistry and biology of carbohydrates, Pune, India, 19-20 January 2014  
 CARBO XXVIII (International conference on challenges in chemistry and biology of carbohydrates), Dehradon, India, 20-22 January 2014  
 16th International Biotechnology Symposium, Fortaleza, Brazil, September 14-19 2014 (PL)  
 ISBOC-10 IUPACs International Symposium on BioOrganic Chemistry, Pune, India, 11-15 January 2015

18<sup>th</sup> European Carbohydrate Symposium, Moskow, August 4-8 2015 (PL)  
XXXVI Conference of the Division of Organic Chemistry, SCI, Bologna 13-17 September 2015 (PL)  
16th Austrian Chemistry Days, Innsbruck, 21-24 Settembre 2015  
Portugise Organic and Medicinal Chemistry Meeting, Porto, 1-3 Dicembre 2015  
11th International Conference and Workshop on Biological Barriers, Saarland Univ. 7 – 9 March 2016  
17<sup>th</sup> International Biotechnology Symposium, Melbourne, Australia, October 2016 (PL)  
Materials.it 2016, Catania, 12-16 December 2016  
International School of nanomedicine, Erice, 8-13 April 2017  
International Summer School on Natural Products (ISSNP), Napoli, 1-5 July 2019 (PL).  
International Summer School on Hybrid (bio)Nanostructures, Alghero, 3-7 September 2019 (PL).