

Prof. FRANCESCO NICOTRA.

Career and International appointments

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 Departem** 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

Chair/Co-Chair of International Conferences

1st Euroconference on Carbohydrates in Drug Research, Stintino, September 1999 (Chair)
2nd Euroconference on Carbohydrates in Drug Research, Sintra, Portugal, September 2000 (Chair)
CHEMBIOTECH2007 at 41st IUPAC World Chemistry Congress, Torino August 2007 (Chair)
13th International Biotechnology Symposium, Dalian, China, October, 2008 (Co-Chair)
14th International Biotechnology Symposium, Rimini, September 2010 (Co-Chair)
15th European, Carbohydrate Symposium, Sorrento, July 2011 (Co-Chair)
16th International Biotechnology Symposium, Forteleza, Brazil, 14-19 September 2014 (Co-Chair)
29th International Carbohydrate Symposium (ICS 2018), Lisboa, Portugal, July, 2018 (Co-Chair)
NanoMed 2018 Venice Italy October 2018 (Chair)
31st International Symposium on the Chemistry of Natural Products, Napoli, October 25-27, 2020 (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
11th European, Carbohydrate Symposium, Lisbon, September 2001
12th European, Carbohydrate Symposium, Grenoble, July 2003
13th 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
14th European, Carbohydrate Symposium, Wien, July 2009
18th International Conference on Organic Synthesis, Bengen, August 2010
26th International Carbohydrate Symposium, Madrid, July 2012
16th European Carbohydrate Symposium, Tel Aviv, July 2013
17th International Biotechnology Symposium, Melbourne, Australia, October 2016
22nd 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
12th International Symposium on Bioorganic Chemistry (ISBOC-12), Shenzhen, China, December 15-18th, 2019
XXIII International Conference on Organic Synthesis (23-ICOS), Shanghai, October 18-23, 2020

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.

Coordinator of National/International projects:

HORIZON 2020 MSCA-ITN-2014 NABBA *Design and development of advanced Nanomedicines to overcome Biological Barriers and to treat severe diseases*

FP7-PEOPLE-2013-IOF-627403 3D Biomimetics

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

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, *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 *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

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, Université Paris Saclay, 2018

Publications

>200 publications on international scientific journals with IF, 19 chapter of books, 12 patents, H index 39 (Google Scholar), 34 (Scopus).

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

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 Portuguese 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 Symposium, 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 European Colloquium on Heterocyclic Chemistry, Bari 2-6 September 2006
233 ACS National Meeting, Chicago, March 25-29, 2007
3rd ERA Chemistry "Flash" Conference, Killarney, 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), Dehradun, 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
18th European Carbohydrate Symposium, Moscow, 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
17th 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).

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.