

# CONTACTS

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technician, SPR and MST specialist

## PERSONNEL (CURRICULUM VITAE)

**DATE OF BIRTH:** December 21<sup>st</sup>, 1962, Bussero, Milan, Italy.

**EDUCATION:** University of Milan, Italy, Doctor in Biological Sciences, 1985 (110/110 cum laude).

**EMPLOYMENTS:** 1983-85: Research Fellow, Chair of Biochemistry, University of Milan. 1986-87: Research Fellow, 1988-00: Research Assistant Professor, 2001-17: Associate Professor, 2017-today: Full Professor, Chair of Pathology & Immunology, (DMMT) University of Brescia.

**FOREIGN INSTITUTES:** Department of Medical Biochemistry & Microbiology, University of Uppsala, Sweden, 2000.

**TEACHING ACTIVITY:** In charge of several courses of the area of pathology and immunology, University of Brescia.

**FIELDS OF RESEARCH:**

1983-85: Purification and biochemical characterization of D-amino acid oxidase.

1986-1992: Purification and characterization angiogenic factors (FGFs), identification of their functional domains and interactions.

1996-2022: Extracellular activities and interactions of HIV-1 Tat protein.

2003-2019: Biological activities and interactions of gp120 and p17 HIV proteins.

2014-2022: Drug discovery in cystic fibrosis.

2001-present: Study of molecular interaction by surface plasmon resonance (BIAcore technology).

2008-present: development of inhibitor of HPV and RSV infection.

2020-today: interaction of SARS-CoV2 spike protein with heparin.

**MEMBER OF EDITORIAL BOARDS:** Open Circul. & Vascular J., J. Bioeng. & Biomed. Sci., Curr. Angiogenesis

**JOURNAL PEER REVIEWER:** he has been asked to act as peer reviewer by 160 international journals among which: Blood, Rev. Med. Virol., Glycobiology, FASEB J., Am. J. Pathol., PLOS ONE, Angiogenesis, Oncogene, FEBS letters, Exp. Cell Res., Int. J. Cancer, Eur. J. Immunol.

**PROFESSIONAL ACTIVITY:** consultant for SIGMA TAU, Rome. Glycores 2000, Milan. Italfarmaco Espana, Madrid. APAvadis, Turin. Istituto Zooprofilattico della Lombardia e dell'Emilia Romagna, Brescia. CNR-ITB, Milan. Istituto di Ricerche Farmacologiche Mario Negri, Bergamo.

**GRANTS:** 1995-today: Ministero dell'Istruzione dell'Università e della Ricerca (MIUR). 1995: Comitato Nazionale delle Ricerche (CNR). 1998-00, 2000-01, 2001-02, 2003-04 and 2010-11: "PRIN" from MIUR. 2002-06, 2010-11: National AIDS project, Istituto Superiore di Sanità. 2005-07: Associazione Italiana Ricerca sul Cancro. 2009-10: CARIPLO foundation. 2014-18: Italian Cystic Fibrosis Research Foundation. 2016-18: Progetti "RICERCA CORRENTE" Ministero della Salute.

**ITALIAN OR INTERNATIONAL PATENTS:**

1) "Miscela di glicosaminoglicani, desossiribonucleotidi ed eparina per la preparazione di terreni di coltura per l'isolamento, crescita e maturazione in vitro di colture cellulari di osteoblasti umani" (Depositato il 24-09-96). 2) "Use of long pentraxin PTX3 for the treatment of diseases caused by an altered activation of the growth factor FGF2" publication n° WO/2002/038169, International application n° PCT/IT2001/000563. 3) "Use of long pentraxin PTX3 for the treatment of FGF-8 mediated tumour diseases" publication n° WO/2003/084561, International application n° PCT/IT2003/000207. 4) "FGF2-binding peptides and uses thereof" publication n° WO/2007/085412, International application n° PCT/EP2007/000538.

He has attended 144 national & international meetings (203 contributes & 55 invited speeches). He is author of 22 book's chapters, 157 papers on peer-reviewed journals ([pubmed](#)) (total IF=1207, active IF=377), 11768 citations, h index=52 ([web of sciences](#)), 60 ([google scholar](#)). He has been included in the "TOP ITALIAN SCIENTIST", VIA-academy

[http://www.topitalianscientists.org/Top\\_italian\\_scientists\\_VIA-Academy.aspx](http://www.topitalianscientists.org/Top_italian_scientists_VIA-Academy.aspx)

He is positioned #95 in Italy and #5152 internationally in the "Biology and Biochemistry" area of the "top scientists" ranking by Research.com <https://research.com/scientists-rankings/biology-and-biochemistry/it>, <https://research.com/scientists-rankings/biology-and-biochemistry>

**PERSONAL DATA:** born on August 26<sup>th</sup>, 1964 in Brescia, Italy.

Italian citizenship

**EDUCATION:** She gained her degree at the School of Biology, University of Milan, Italy in 1989 (101/110). She is now a technician at the Section of Experimental Oncology and Immunology, Department of Molecular and Translational Medicine, University of Brescia

**HER RESEARCHES HAS FOCUSED ON:** 1987-92: biochemical and biological characterization of Basic Fibroblast Growth Factor (FGF2). 1992-02: study of FGF2 interaction with endothelial cells. 2002-20: study of biological activities of HIV-1 Tat and its interactions with cell-associated and extracellular binders. 2016-present: SPR analysis (Biacore X-100). 2020-present: MST analysis (Nanotemper Monolith NT.115).

She is author of 47 scientific publications in peer-reviewed journals.

**PROFESSIONAL ACTIVITY:** consultant for Istituto di Ricerche Farmacologiche Mario Negri, Bergamo.

**TECHNICAL SKILLS AND COMPETENCES:** Biochemistry: Utilization of SPR BIAcore X100 and MST Monolith NT.115 apparatus and of dedicated software for interaction data analysis. Protein extraction from tissues and cultured cells, chromatographic methods (affinity, ion exchange, gel filtration, FPLC systems). Production and purification of recombinant proteins, Silver Stain, Western Blot, ELISA assays, DNA and RNA extraction, PCR. Cell Biology: Culture of immortalized cell lines, isolation of endothelial cells from umbilical cord, cell proliferation, adhesion and migration assays, *in vitro* angiogenesis (matrigel, fibrin gel, collagen gel assays), transfection, immunofluorescence.

### RUSNATI MARCO



### URBINATI CHIARA

