

CURRICULUM VITAE



PERSONAL INFORMATION

Name **ORNELLA BOSCO**
Date of birth 22/06/1964
Current Framework Research Technician (D5)
Place of employment University of Turin, Department of Medical Sciences - AOU "Città della Salute e della Scienza" of Turin
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ACADEMIC HISTORY

1989 Degree in Biological Sciences, University of Genoa
1990 Qualifying examination as Professional Biologist, University of Genoa
1993 Fellowship on A.I.D.S. research funded by the "Istituto Superiore della Sanità"
1994 Specialization in Clinical Pathology, University of Genoa
1996 Theoretical and practical course of Flowcytometry (Advanced Biotechnology Center - University of Genoa).

PROFESSIONAL BACKGROUND

1986-1988 Internship at the Institute of Pharmacology of the University of Genoa for the preparation of the experimental thesis entitled: In vitro evaluation of the genotoxic effects of the nitrosation products of chlordiazepoxide.
1989-1990 Post-graduate training in the Laboratory of Clinical Methodology at the Department of Internal Medicine - University of Genoa.
1990-1998 Research activity as Biologist in the Laboratory of Clinical Methodology at the Department of Internal Medicine - University of Genoa.
March-October 1998 Professional assignment as 1st Level Biologist in the Laboratory of Clinical Analysis at the San Paolo Hospital in Savona - ASL 2 SAVONESE.
1999-present Technician with research functions in the Laboratory of "Cellular and Molecular Biology applied to critical states of Internal Medicine" (Prof. G. Montrucchio) at the Department of Medical Sciences, University of Turin.

LANGUAGE SKILLS

ITALIAN Native language+

ENGLISH

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
B1	Independent user	C1	Proficient user	A2	Basic user	B1	Independent user	B2	Independent user

<p>COMPUTER SKILLS</p>	<p>Good computer skills through the use of Windows Office applications (Word, Excel, PowerPoint), the graphics programs Adobe Photoshop, Photodraw, CorelDraw and GIMP2 and online bibliographic resource PubMed. Good knowledge of GraphPad Prism and SigmaStat statistical programs.</p>
<p>TECHNICAL SKILLS</p>	<p>Excellent knowledge of flow cytometry analysis: cell surface and intra-cytoplasmic immunofluorescence, apoptosis and cell cycle analysis, cytokine secretion quantification, platelet-leukocyte interaction and detection of platelet activation markers. Good ability to use cell and molecular biology techniques such as: cell culture, leukocyte subpopulation purification, platelet aggregation, protein, RNA and DNA extraction from cells and tissues, immunoprecipitation, Western Blot and Dot Blot analysis, PCR, ELISA, immunohistochemistry, light and confocal microscopy, EV isolation and characterization, and mitochondrial oxygen consumption rate (Seahorse).</p>
<p>MAIN SCIENTIFIC ACHIEVEMENTS</p>	<p>The scientific activity is documented by 60 papers published in national and international journals with the following main research lines (Scopus: H-index 22; 1566 citations):</p> <ul style="list-style-type: none"> - study of the role of extracellular vesicles (EV) in the critically ill patient (<i>IJMS 2023</i>); - evaluation of diagnostic accuracy and prognostic capacity of miRNAs and other circulating biomarkers for the diagnosis of heart failure in critically ill patients; - study of the immunopathological mechanisms that regulate the growth process of liver and gastrointestinal tumors (<i>Oncotarget 2018, Front Pharmacol 2018, IJMS 2021</i>); - study of platelet function, leukocyte-platelet interaction, humoral mediators and platelet mitochondrial dysfunction in critically ill patients (ischemic heart disease, severe sepsis/ septic shock). In particular, the involvement of thrombopoietin in cardiovascular pathophysiology (<i>J Am Coll Cardiol 2006, Basic Res Cardiol 2010, Mediators Inflamm 2012</i>), in sepsis (<i>J Thromb Haemost 2009, Clin Chem Lab Med 2014, PLoS One 2016, Int J Mol Sci 2017</i>), in cigarette smoking effects (<i>Atherosclerosis 2010</i>), in acute pancreatitis (<i>Pancreas 2017</i>), in diabetic disease (<i>IJMS 2021</i>) and in SARS-CoV-2 infection (<i>eBioMedicine 2022</i>) was evaluated; - effects of the histone deacetylase inhibitors (Valproic Acid, LBH589) on thyroid and breast cancer cell lines (<i>J Clin Endocrinol Metab, 2005; J Endocrinol, 2006; Cancer Lett, 2008; Oncol Rep, 2009; Breast Cancer Res Treat, 2010, Int J Cancer 2011</i>); - role of extracorporeal shock waves in modulating the differentiation of stem cells derived from adipose tissue into osteoblasts (<i>J Tissue Eng Regen Med 2014</i>) or myofibroblasts (<i>Wound Repair Regen 2016</i>); - study of some pathophysiological mechanisms responsible for triggering cellular damage in acute pancreatitis with particular attention to the role of PI3Kgamma in the altered stimulus-secretion coupling in pancreatic acinar cells (<i>Am J Pathol 2004</i>); - role of PI3Kgamma in platelet activation and in ADP-dependent thromboembolic vascular occlusion (<i>FASEB J 2001</i>), and in cardiac contractility (<i>Cardiovasc Res 2003</i>); - study of the bacterial lipopolysaccharides involvement on leukocyte-mediated platelet aggregation in sepsis (<i>Thromb Hemost, 2003</i>);

- role of class I HLA molecules in acquired immunodeficiency (AIDS), in interactions with β 2-adrenergic receptors and in apoptosis (*Eur J of Clin Pharmacol* 1993, *AIDS* 1993, *J Clin Endocrinol Metab* 1993; *Human Immunology* 1994, *Cancer Immunol Immunother* 1995, *AIDS Res Human Retroviruses* 1997). Evaluation of the ability of corticosteroid drugs to induce apoptosis on peripheral human lymphocytes (*Clin Exp Immunol* 1996).

She has participated in over 120 training events including conferences and professional update courses.

Dr. Bosco also participates in the training of undergraduates, PhD students and in the activity of SCDU "Medicina Interna 2 U" of the AOU "Città della Salute e della Scienza" of Turin.

March 28, 2023

Dr. Ornella Bosco