

## **PERSONAL DATA**

Name: Andrea De Lerma Barbaro

Position: Permanent University Researcher

Citizenship: Italian

Address: Department of Biotechnology and Life Sciences (DBSV) University of Insubria Via Manara 7, 21052 Busto Arsizio (VA) tel. +39-0331-339435

## **LANGUAGES SPOKEN**

English (written and spoken)

## **UNIVERSITY AND POSTGRADUATE EDUCATION**

1980-1984 Degree in Biological Sciences obtained in Naples with a grade of 110/110 cum laude

1985-1989 Doctorate in Medical Genetics (II cycle) at La Sapienza University of Rome, carried out at the Tissue Typing Center of the Careggi Polyclinic in Florence, directed by Prof. PL Mattiuz

## **SCHOLARSHIPS AND RESEARCH CONTRACTS - IN ITALY AND ABROAD**

-1987 Visiting Scientist at the "Laboratoire d'Histocompatibilité du Centre Régional de Transfusion Sanguine" in Rennes, directed by Dr. R. Fauchet

-1989 Winner of a two-year MISM scholarship at the International Institute of Genetics and Biophysics (IIGB) in Naples. Research supervisor: Dr. J. Guardiola.

-1992-1995 Fellow of the Scientific and Cultural Association for the Promotion of Biomedical Research (ARBI) in the laboratory of Prof. RS Accolla at the Institute of Immunology and Infectious Diseases of the University of Verona.

-1996-1997 Technical consultant at the University of Verona

-1998-2000 Technical consultant at the University of Insubria in Varese

## **UNIVERSITY POSITION**

Since 2001 University researcher (disciplinary sector MED04, General Pathology) at the University of Insubria in Varese

## **TEACHING ACTIVITIES**

2000-2003 Course lecturer: Molecular Methods in Clinical Pathology for the Bachelor's Degree in Healthcare Technology at the University of Insubria in Varese

2001-2004 Course lecturer: Immunology for the Bachelor's Degree in Nursing Sciences at the University of Insubria in Varese

2004-2011 Course coordinator: General Pathology for the Bachelor's Degree in Radiology, Healthcare Technology, and Dental Hygiene at the University of Insubria in Varese

2004-2011 Course coordinator: Immunology for the Bachelor's Degree in Healthcare Technology at the University of Insubria in Varese

2007-2011 Course coordinator: General Pathology for the Professional Educator degree program at the University of Varese

2011-2016 Seminars in General Pathology at the School of Specialization in Pathological Anatomy at the University of Varese

2012-2018 Course coordinator for Fundamentals and Techniques of Immunology for the Bachelor's Degree in Biological Sciences and Technologies at the University of Insubria in Varese

2015-2016 External lecturer for the course in General Pathology at the Italian Academy of Osteopathic Medicine (AIMO), Saronno

2015-2017: lecturer in General Pathology for the degree course in Medical Radiology Techniques at the University of Insubria in Varese

2016-2020: lecturer in Neuroimmunology for the degree course in Biomedical Sciences at the University of Insubria in Varese

2016-2020 Lecturer in Immunology of Cancer for the Biomedical Sciences degree program at the University of Insubria in Varese

2019-2021 Lecturer in Fundamentals and Techniques of Immunology for the Biological Sciences degree program at the University of Insubria in Varese

### **CURRENT TEACHING ACTIVITIES**

2021-2026: Professor of Immunopathology for the Biomedical Sciences degree program at the University of Insubria in Varese

2022-2026: Professor of Immunology with Elements of Pathology for the Biological Sciences degree program at the University of Insubria in Varese

2022-2026: Professor of General Pathology for the Bachelor's Degree in Nursing Sciences at the Busto Arsizio Hospital of the University of Insubria in Varese

2023-2026: Professor of Clinical Pathology for the Bachelor's Degree in Nursing Sciences at the Busto Arsizio Hospital of the University of Insubria in Varese

### **RECENT RESEARCH ACTIVITIES**

-study of the tumor microenvironment and the systemic effects of neoplastic disease, a)chronic inflammation and onset of neoplastic disease in intestinal cancer (De Lerma Barbaro et al Int J Oncol 2014)

a) non-linear relationship between the total amount of tumor tissue and the state of cachexia (De Lerma Barbaro Int J Oncol 2015)

b) reprogramming of metabolism in the tumor microenvironment aimed at supporting immunotherapy (De Lerma Barbaro et al Vaccines 2021)

-immune system in insects, mechanisms of phagocytosis evasion by an entomopathogenic bacterium (De Lerma Barbaro et al Insects 2019)

-historical perspective study of the evolution of acquired immunity receptors (De Lerma et al International Journal of Immunogenetics 2025)

### **PAST RESEARCH ACTIVITIES**

-analysis of the regulation of class II MHC molecule expression

a) using a somatic cell genetics approach (De Lerma Barbaro et al J. Immunol 1994; De Lerma Barbaro et al Eur J Immunol 1996)

b) study of the instability of transcripts of the CIITA transcriptional transactivator, master gene for MHC-II expression (De Lerma Barbaro et al Eur J Immunol 2005)

c) by studying the epigenetic mechanisms of gene silencing of MHC class II expression (De Lerma Barbaro et al Inter Immunol 2008)

-the application of knowledge of the mechanisms regulating the expression of MHC class II genes in infections caused by M. tuberculosis, HIV, or HTLV-2, and in cancer immunotherapy

a) study of the interference of M tuberculosis phagocytosis with the MHC class II antigen presentation system (De Lerma Barbaro et al Eur J Immunol 1999; De Lerma Barbaro et al Eur J Immunol 2002)

b) Study in a mouse model of prophylactic or therapeutic vaccines based on the ectopic expression of CIITA in tumor cells (Mortara et al Clin. Cancer Res. 2006 ; Mortara et al International Immunol 2009)

c) CIITA expression in the target cell of infection interferes with HIV viral replication (Accolla et al Trends Immunol 2001; Accolla et al Eur J Immunol 2002)

d) CIITA expression in the target cell of infection interferes with HTLV-II viral replication (Casoli et al Blood 2004; Tosi et al PNAS 2006)

### **RECENT COLLABORATIONS**

Stefano Giovannardi (University of Insubria)

Lorenzo Mortara (University of Insubria)

Maurizio Brivio (University of Insubria)

### **PUBLICATIONS**

Andrea De Lerma Barbaro is the author of 35 publications in peer-reviewed journals, which have a total of 869 citations and an h-index of 18.