

Fausto Baldanti – Curriculum and scientific activity

Education

- 1990 Graduation as Medicine Doctor, Università degli Studi di Pavia, Italy 110/110 Cum Laude
1995 Specialization in Infectious Diseases, Università degli Studi di Pavia, Italy 50/50 Cum Laude
2004 Specialization in Microbiology and Virology, Università degli Studi di Padova, Italy 70/70 Cum Laude

Carrer

- 1994-2010 Staff MD, Laboratori Sperimentali di Ricerca, Area Infettivologica, Fondazione IRCCS Policlinico San Matteo, Pavia in quality of:
2010-2014 Head, Molecular Virology Unit, Virology and Microbiology Dpt., Fondazione IRCCS Policlinico San Matteo, Pavia, Italy
1/11/14-present Associate Professor, Dpt. of Clinical, Surgical, Diagnostics and Pediatric Sciences, University of Pavia, Pavia, Italy

Professional assignments

- since 1998 Contract Professor, Infectious Diseases Post-Graduation School, Pavia University, Pavia
2004-2005 Contract Professor, Virology, Biotechnology School, Vita-Salute San Raffaele University, Milano
2009-2011 Contract Professor, Virology, Biotechnology School, Pavia University, Pavia
2010-2011 Contract Professor, Microbiology and Virology Post-Graduation School, Pavia University, Pavia
2011-2012 Contract Professor, Laboratory Technical School, Pavia University, Pavia
2012 Contract Professor, Virology English Medicine School, Pavia University, Pavia
2013 Contract Professor, Virology, Biotechnology School, Pavia University, Pavia
2017 Director, School of Specialization in Microbiology and Virology, University of Pavia

Stages

- 1994-1996 Dept. of Virology, Glaxo-Wellcome Inc. Duham, NC, USA (mechanisms of antiviral drug resistance in human cytomegalovirus and hepatitis B virus)
1998 Aviron, Mountain View, CA e Ist. Microbiology and Immunology, Stanford University, Stanford, CA, USA (human cytomegalovirus cosmid library)
2000 Max von Pettenkofer Institut, University of Munich, Munich, Germany (cloning and mutagenesis of human cytomegalovirus genome in BAC)

Scientific activity

Coauthor of 279 papers published on International scientific journals quoted in Medline (h-index 46)
Coauthor of more than 450 presentations (oral and poster) at Italian and International Congresses

Member of the Editorial Board of *Journal of Clinical Virology* (2009-2010); *Committee for Internal Audit, Journal of Clinical Virology* (2010-2012); *Associate Editor Journal of Clinical Virology* (2012-present); *Editorial Board Antiviral Research* (2011-2012), *Editorial Board New Microbiologica* (2012-present), *Editorial Board PlosONE* (2014-present)

Referee for: *Haematologica*, *Antiviral Research*, *Journal of Antimicrobial Chemotherapy*, *Journal of Clinical Virology*, *Clinical Microbiology and Infection*, *BioMed Central Infectious Diseases*, *Journal of Infectious Diseases*, *Antimicrobial Agents and Chemotherapy*, *Journal of General Virology*, *European Journal of Infectious Diseases and Clinical Microbiology*, *Clinical Infectious Diseases*, *Journal of Medical Virology*, *BioMed Central Critical Care*, *Liver Transplantation*, *Transplant Infectious Diseases*; *Diagnostic Microbiology and Infectious Diseases*, *HIV Therapy*; *Current HIV Research*; *PloS One*; *Antiviral Chemistry & Chemotherapy*; *Emerging Infectious Diseases*; *Eurosurveillance*, *Expert Review of Clinical Immunology*, *Journal of Medical Microbiology*.

- **Translational research on respiratory viral infections:** As Regional Reference Center for the diagnosis of severe respiratory infections and Regional Reference Center for the Italian Influenza Surveillance Network (INFLUNET) of Influenza Virus Infections, our Unit is devoted to the surveillance and molecular epidemiology of influenza viruses. In addition, our group contributed to the understanding of pathogenetic mechanisms of severe respiratory virus infections (including the identification of new virulence factors and the analysis of immune response in severe respiratory syndromes). Finally, a significant impact in developing new approaches to diagnosing viral infections in different groups of pts is acknowledged to our research group.
- **Translational research on emerging and reemerging viruses:** As a Regional Reference Center for emerging virus infections, our group is involved in the development and application of advanced diagnostic methods for the identification and typing of arbovirus infections (Phleboviruses, Dengue, West-Nile, Zika and chikungunya virus). Our research activity has allowed the identification of broadly reacting and potentially protective human antibodies for mosquito-associated flavivirus. T-cell immune response specific for emerging viruses is presently under investigation for its protective role during Zika virus infection in pregnancy. In addition, our group contributed significantly in the surveillance and molecular epidemiology of arbovirus infections as well as of other emerging (EVD68, EV-D71, parechovirus) and reemerging (measles) viruses.
- **Virological and immunological monitoring of viral opportunistic infections in immunocompromised patients:** An important translation path of our Unit is linked to the innovation of both (virological and immunological) monitoring parameters of opportunistic infections in immunocompromised patients, in particular solid organ and hematopoietic stem cell transplanted patients. A number of innovative approaches for the determination of T-cell response to CMV, EBV, VZV, HSV (and other opportunistic infections) have been developed. In addition, (mono- bi- and multicenter) clinical trials to determine their prognostic role for a better management of transplanted patients have been recently promoted.
- **Monitoring and management of viral infections in pregnancy:** A prominent role in both translational and basic research for the management of human cytomegalovirus (HCMV) and rubella virus infections during pregnancy is acknowledged to our Unit. The spectrum of activities encompasses the definition of pathogenetic molecular mechanisms as well as immunologic (both B- and T-cell mediated) response parameters. Our experience in this field and the ongoing collaborations has enabled us to confront with the emergence of Zika virus infection in pregnancy according to a similar approach, obtaining high profile scientific results.