

Curriculum vitae - Maurizia Rossana Brunetto, M.D.

Education:

- M.D. magna cum laude, on October 17, 1984, at the University of Turin School of Medicine, discussing a thesis entitled "Intrafamilial Transmission of HDV".
- Licensed to medical practice (Italy) at the University of Turin School of Medicine, 1985.
- Postgraduate Specialty in Gastroenterology, magna cum laude, on November 12, 1988, at the University of Turin School of Medicine, discussing a thesis on "Monitoring of viral replication and immune response during interferon therapy in chronic hepatitis B patients".
- Postgraduate Degree in Internal Medicine Ultrasound Diagnosis in 1989 at the University of Bologna School of Medicine.

Profession:

- October 1983 to January 1985: Trainee in Gastroenterology at the Gastroenterology Department of the Molinette Hospital of Turin, Italy (Head Prof. G. Verme).
- January 1985 to September 1993: Assistant Professor of Gastroenterology at the Gastroenterology Department of the Molinette Hospital of Turin, Italy.
- September 1993 to May 1998: Associate Professor of Gastroenterology at the Gastroenterology Department of the Molinette Hospital of Turin, Italy.
- May 1998 to August 2001: Associate Professor of Gastroenterology at the Gastroenterology and Hepatology Unit of Santa Chiara Hospital of Pisa, Italy.
- September 2001 to December 2003: Acting Director of Gastroenterology at the Gastroenterology and Hepatology Unit of the University Hospital of Pisa, Italy.
- December 2003 to date: Director of Gastroenterology at the Gastroenterology and Hepatology Unit of the University Hospital of Pisa, Italy.
- June 2016 to May 2022: Adjunct Professor of Internal Medicine - Department of Clinical and Experimental Medicine - University of Pisa
- October 2018 to date: Research associate at the Institute of Biostructure and Bioimaging - (IBB)-CNR
- November 2020 to October 2023: Chair of the Integrated Department of Medical Specialties of the Pisa University Hospital
- November 2023 to date Full Professor of Gastroenterology - Department of Clinical and Experimental Medicine - University of Pisa
- November 2024 to date Director of the Department of Clinical and Experimental Medicine of Pisa University

Scientific Activity

- September 1981 to September 1983: Research fellow at the General Pathology Institute of the University of Turin and at the Laboratory of the Department of Biochemistry of the Brunel University of Uxbridge (U.K.).

- Visiting scientist at the laboratory of Molecular Biology of Max Planck Institut für Biochemie of München, Germany from May 1989 to August 1989 where she characterized the HBeAg mutant of HBV.
- Visiting scientist at the II Dept. of Virology of the National Institute of Health, Tokyo, Japan from April 1993 to December 1993 and from July 1994 to September 1994 where she studied the genomic heterogeneity of HBV and HCV.

The research activity has been mainly focused on the study of the pathogenetic implications of hepatitis virus (HBV, HCV and HDV) infection on the analysis of factors influencing the progression of chronic hepatitis to cirrhosis and hepatocellular carcinoma and on the treatment optimization of chronic viral hepatitis. My studies were aimed to identify specific clinic-pathologic profiles and characterize new etiologic agents, biomarkers and therapies. Personalized medicine: development of diagnostic algorithms.

Personal scientific contribution. HBV Infection. Characterization of IgM anti-HBc as etiologic markers of HBV induced liver damage. Seminal work in the clinic-pathologic characterization of the HBeAg negative form of chronic hepatitis B and its natural history and response to antiviral therapy and in the identification of pre-core stop mutant (G1896A mutant) responsible for the HBeAg negative form of CHB. Demonstration of the clinical usefulness of HBsAg serum levels measurement in the monitoring of antiviral therapy and identification of HBeAg negative infection. Definition of the clinical cut-off, currently suggested by the international guidelines. Demonstration that HBsAg particles carry miRNA and their characterization. Identification of specific mRNA profile associated with HBeAg negative infection. Design and conduct of clinical trials (antiviral treatment, Phase 2-4). Expert for the definition of national/international guidelines.

HCV Infection. Characterization of the immune response against the hypervariable region of HCV envelope protein with its pathogenetic implication; antiviral treatment and HCC risk; development of bio-mathematical models to study HCV dynamics under antiviral treatment. Design and conduct of clinical trials (antiviral treatment, Phase 2-4). Expert for the definition of national/international guidelines. **Imaging.** Liver elastometry: clinical validation and demonstration that liver stiffness results from fibrosis, necro-inflammation and hematic congestion.

Recognition

- Winner of a 2 years (1982-1983) fellowship of the National Foundation for Cancer Research of Bethesda for a study on aldehyde metabolites and lipid peroxidation.
- Winner of a 2 years (1986-1987) fellowship of the Regional Government of the Piemonte Region for a study on the woodchuck animal model for viral hepatitis.
- Winner of the 1989 Young Investigator Award for the discovery of the HBeAg minus HBV mutant.
- Winner of the 1 year (1993-1994) fellowship of the Human Science Foundation of Japan.
- Winner of the Young Investigator Award (2007) Asian Pacific Association for the Study of the Liver for the demonstration of the clinical usefulness of quantification of serum HBsAg

Experience in clinical trials under ICH-GCP: principal investigator in 50 clinical trials (Phase I,II,III) on chronic hepatitis B, chronic hepatitis C, chronic hepatitis Delta, Primary Sclerosing Cholangitis, Primary Biliary Cholangitis, Non Alcoholic Steatohepatitis, Hepatocellular carcinoma and transplanted patients.

Publications:

Author and co-author of over 314 scientific papers on med-line, which have published in a variety of journals, including the *Proceeding of the National Academy of Science*, *Lancet*, *Virology*, *Gastroenterology*, *Hepatology*, *Journal of Hepatology*, *Journal of Medical Virology*, *Journal of Viral Hepatitis*, *antiviral therapy*, *Digestive and Liver Diseases*

H Index: Google Scholar 78; Citations 28941, i10index 275; *Scopus = 68*, Citations 20043; *Web of Science = 54*, Citations 13321 from 10160 documents

Maurizia R Brunetto