

EASL Awardee 2006

Professor Mario Rizzetto, MD



Mario Rizzetto was born on June 4, 1945, in Padova. He graduated in Medicine and Surgery at the University of Padova in 1969. He then moved to Torino where he started his clinical training in Internal Medicine with Prof. Beretta Anguissola.

In Torino, Mario Rizzetto met Prof. Giorgio Verme, who was at that time chief of the Gastroenterology Unit at the Mauriziano Hospital and one of the most eminent clinical hepatologists in Italy. Following the encouragement and advice of Prof. Verme, Mario Rizzetto decided to go into liver research.

Between 1972 and 1973 Mario Rizzetto was in London, at the Central Middlesex hospital and Medical School, working as research fellow with Deborah Doniach on liver immunology. His scientific talent, in conjunction with his unique intuitive curiosity, was immediately successful and led him to discover a new auto-antibody reactivity in the sera of patients with chronic hepatitis, the anti-microsomal antibodies, later termed anti-LKM. Mario Rizzetto's formative training in the laboratory of Deborah Doniach was extremely important for his subsequent scientific career.

Back in Torino, Mario Rizzetto realized that in Italy and Southern Europe viral hepatitis was much more of a problem than autoimmune hepatitis and started to work on hepatitis B. This was a rewarding choice and one of great fortune for hepatology research. The immunopathological approach learned in London, and the use of the double immunofluorescence technique that had been successful in differentiating anti-LKM from the anti-mitochondrial autoantibodies, led Mario in 1977 to make his second, even more important, discovery, of a new antigen/antibody system linked to chronic HBV infection, that he named Delta. The delta antigen turned out to be the marker of a new hepatitis virus, the delta virus or HDV.

Because of the complex interactions between the hepatitis B virus and the HDV, the discovery of the latter required the experimental model of the chimpanzee, the only animal susceptible to HBV infection. It was therefore fortunate that Mario had the chance to work in 1978 and 1979 at the Department of Molecular Virology of Georgetown University directed by John Gerin and at the Laboratory of Infectious Diseases of the National Institutes of Health directed by Robert Purcell. With the aid of the animal model together with the supervision, expertise and advice of his American mentors, Mario identified the HDV as the smallest RNA animal virus infectious in man which required obligatory helper functions of HBV and could therefore thrive only in HBsAg-positive subjects.

The scientific impact of the discovery of HDV was enormous, not only for hepatology, but also for virology and molecular biology because this virus was recognized to be a unique type of defective agent, belonging to a family previously described only in plant virology.

Back in Torino in 1980, Mario set up his own research group and was thereafter involved in many studies that have fully described the pathobiology, epidemiology and clinical features of HDV and hepatitis D.

In 1988 he was appointed Associate Professor of Gastroenterology at the University of Torino, and was then granted a full chair in Gastroenterology in 1996.

Prof. Rizzetto has been and is still very active nationally and internationally as Chairman and Member of Scientific and Educational Committees and Advisor to major health organizations and regulatory institutions. He has served as Advisor to WHO, to the Italian Ministry of Health, the National Research Council for Biological and Medical Sciences as well as to several other international scientific bodies. He was secretary of the Italian Association for the Study of the Liver

in 1983–84, and President of the Italian Society of Gastroenterology in 2005–2006. Between 1987 and 1989 he served on the Scientific Committee of EASL, being its Secretary in 1988–89. He has organized many important International Scientific events, including the annual EASL meeting in Torino in 1987 and more recently, a monothematic EASL meeting on liver biopsy, again in Torino. He has served and still serves on the Editorial Board of major international hepatology journals.

During the last 3 decades Mario Rizzetto has been continuously productive in research. Besides hepatitis D, his major interests have been viral hepatitis B and C, cirrhosis, portal hypertension, liver transplantation, hepatocellular carcinoma, and more recently, also liver steatosis and NASH.

From 1973 he has published more than 330 peer reviewed papers, reviews and editorials that have appeared in the most prestigious international journals.

In recognition of his numerous scientific achievements, he has received many international awards, including the King Faisal Prize for Medicine in 1985, the Robert Koch Prize for Medicine in 1987, the William Beaumont prize for Gastroenterology in 1988 and the Hans Popper Prize for Hepatology in 1992. He was awarded the gold medal for medicine by the Italian Health Ministry in 1988.

Prof. Mario Rizzetto is currently Director of the Department of Gastroenterology and Hepatology at the University Hospital of Torino, one of the best Hepatology Centres in Europe, with a very active liver transplant program and outstanding clinical expertise in all fields of liver disease. He is well known to his co-workers as being an untiring organizer and co-ordinator, often quite demanding, but always ready to listen, advise and award merit.

All those who have had the opportunity to work in Torino with Mario Rizzetto have learnt a lot from him, and many of them have subsequently reached outstanding positions in Hepatology and Gastroenterology all over Italy.

For the last 20 years Prof. Mario Rizzetto has been a source of pride for Italian Research and a Scientific and clinical reference for international hepatology. All of us now commend him on receiving this EASL recognition award.

Alfredo Alberti
Department of Clinical and Experimental Medicine
University of Padova
Padova, Italy