Biography

Dr Rita Carsetti

Rita Carsetti trained in Medicine and Obstetrics and Gynecology at La Sapienza University of Rome (Italy) before discovering her passion for science during her postdoctoral training in the United States, at the M.D. Anderson Hospital in Houston (Texas). She followed this with a second postdoc at the Max-Plank Institute for Immunobiology in Freiburg (Germany), in the department of Georges Koehler, who had received the Nobel Prize for the discovery of monoclonal antibodies. At the Max-Planck she also became responsible for the flow-cytometry core facility and later worked in the departments of Michael Reth and Thomas Boehm.

After 13 years in Germany, she returned to Italy (Bambino Gesù Children's Hospital, Rome) with a strong background in basic immunology of murine B cells. At this point she turned her attention to human B cells for a more patient-orientated research approach. The close contact with clinicians and her role as head of the Diagnostic Immunology Unit gave her the possibility to learn how human B cells change with age, immunodeficiency, infection, transplantation, and vaccination. The COVID-19 pandemic and the global vaccination campaign gave her the possibility to learn more about the development, function, and persistence of human memory B cells after vaccination in healthy subjects and patients with primary or secondary immunodeficiencies.

Throughout her career, Rita Carsetti has made a number of discoveries regarding the development of human and murine B cell populations and the effect changes in such populations have on infection and immunodeficiencies in humans. Her recent work on SARS-CoV-2 and RNA vaccination has been vital in demonstrating how human memory B cells aid immune protection and how mucosal immunity is induced in neonates born to SARS-CoV-2 infected mothers. Altogether, Rita Carsetti's work is extremely relevant to both basic and clinical immunologists.