

Roberto Chiarle, M.D.

Short biography.

Throughout clinical work and research, Dr. Chiarle has gained deep experience and expertise both as a clinical pathologist as well as in the areas of Haematopathology, Oncology, Immunology, and Molecular Biology. He received his M.D. degree from the University of Torino, Italy, and then refined his clinical skills as a Visiting Fellow in the Department of Pathology, New York University Medical Center. In Italy, his academic ranks eventually progressed up to the promotion to Professor of Pathology at the University of Torino Medical School in 2014. He started a new laboratory in 2012 at the Department of Pathology at Children's Hospital and Harvard Medical School, Boston, USA. In 2020, he was appointed Professor of Pathology at Harvard Medical School.

As a clinician, he is currently an attending hematopathologist at the at Boston Children's Hospital. In research, Dr. Chiarle has been leading his own groups in the University of Torino since 2001 and in Boston since 2012. He won several national and international awards, including an award from the Italian National Academy of Science, two prestigious European Research Council (ERC) grants, an AICR-UK award, several NIH grants and grants from the LUNGeivity foundation, V Foundation, the Ellison Foundation, the Bridge Project and others.

One major research interest has been to study the mechanisms and pathways of tumor formation activated by the ALK oncogene, as well as the development of innovative therapies for ALK-positive cancers, such as an ALK-specific cancer immunotherapy. Chiarle's group has developed mouse models for both ALK-rearranged lymphoma and lung carcinoma to study the molecular pathogenesis of ALK-driven tumors. Recently, the group has developed an ALK vaccine that instructs the immune system to recognize and eliminate ALK-positive lymphoma and lung cancer cells. Additional areas of interest involve the study of the biological mechanisms of chromosomal translocation formation that initiate tumor formation.