



Marco Colonna, MD
Professor
Pathology & Immunology
A Lymphopoietic Niche at the CNS Borders

Dr. Marco Colonna was born in Parma, Italy, received his medical degree and specialization in internal medicine at Parma University (Parma, Italy) and completed his postdoctoral training at Harvard Medical School (Cambridge, Massachusetts, USA). He became a scientific member of the Basel Institute for Immunology (Basel, Switzerland). Since 2001 he has been a Professor of Pathology & Immunology at Washington University School of Medicine in St. Louis, MO, USA. Dr. Colonna's research focuses on immunoreceptors. In this field his accomplishments encompass identification and characterization of the Killer cell Ig-like receptors and HLA-C/B polymorphisms as their inhibitory ligands, as well as the discovery of the KIR, LILR and TREM inhibitory and activating receptor families. Through analysis of the cellular distribution of these receptors, he identified plasmacytoid dendritic cells as source of IFN- α / β in anti-viral responses and innate lymphoid cells that produce IL-22 in mucosae. His current areas of research include: 1) Innate lymphoid cells in mucosal immunity. 2) Plasmacytoid dendritic cells in host defense and autoimmunity. 3) Impact of TREM2 and innate immunoreceptors on the functions of tumor associated macrophages and microglia in cancer and Alzheimer's disease.