Roland Kolbeck, Respiratory, Inflammation & Autoimmunity, **MedImmune**

Roland Kolbeck, Ph.D., is Senior Director Research, Department of Respiratory, Inflammation & Autoimmunity at MedImmune where he is leading a team of scientists responsible for the discovery of new targets and protein-based therapies (mainly monoclonal antibodies) for the treatment of respiratory and autoimmune disorders. He is Associate Professor in the Department of Pathology and Molecular Medicine, Faculty of Health Sciences, McMaster University, Hamilton, Canada.

Dr. Kolbeck's research is focused on deciphering underlying pathogenic mechanisms of chronic inflammatory diseases and linking them back to clinical phenotypes. In diseases of the lung, such as Asthma and COPD, his research is focused on the pathogenic role of eosinophilic granulocytes and the lung epithelium. Epithelial injury by pathogens and environmental toxins results in errant repair, tissue remodelling and the release of cytokines such as IL-33, TSLP and IL-25, which act on a wide range of immune cells implicated in the pathogenesis of respiratory diseases. In autoimmune diseases, such as Rheumatoid Arthritis (RA) and Systemic Lupus Erythematosus (SLE), Dr. Kolbeck's research has focused on pathways and cell types that connect the innate with the adaptive immune system. His team is actively exploring the role of dendritic cells, especially plasmacytoid dendritic cells, in the pathogenesis of autoimmune diseases and how they subsequently govern the adaptive immune response, with a special interest in the pathogenic role of Type 1 Interferons.

Dr. Kolbeck has published over 60 scientific articles and has held numerous positions in industry with increasing responsibilities. Before joining MedImmune, Dr. Kolbeck has held senior positions at Peptimmune, Inc. and Millennium Pharmaceuticals, Inc. focusing on the discovery of peptide-based therapies and small molecule inhibitors for the treatment of inflammatory diseases. Dr. Kolbeck has obtained his Ph.D. at the Max-Planck Institute for Neurobiology in Munich, Germany where he investigated the role of neurotrophic factors during nervous system development.