

Short CV: Allan Mowat

Professor Allan Mowat is Professor of Mucosal Immunology in the Centre for Immunobiology in the Institute of Infection, Immunology and Inflammation at the University of Glasgow. He graduated in Medicine in Glasgow, before carrying out a PhD in Immunology at the University of Edinburgh and then returning to Glasgow as a research fellow and then faculty member. He is also a Consultant in Clinical Immunology, as well as being a Trustee of the British Society of Immunology and has just stepped down as President of the Society for Mucosal Immunology. He has been involved in research into mechanisms of intestinal immunity for more than 30 years and current work focuses on the ontogeny and functions of mucosal dendritic cells and macrophages. Most recent studies have shown that both the cell types differentiate locally from precursors after they have arrived in the intestinal mucosa, with classical monocytes being responsible for continuous replenishment of the macrophage population and conventional DC precursors maturing into 4 discrete subsets based on the expression of CD11b and CD103. These DC subsets have distinct functions and the intestine contains a unique population of CD11b+CD103+ DC which is the dominant population in the small intestine and which may play a tolerogenic role in steady state conditions. The development of this subset requires signalling through the TGF β receptor and in their absence, there is defective generation of inducible FoxP3+ regulatory T cells after feeding tolerogenic doses of protein antigen.