Lucy Walker is Professor of Immune Regulation at the Institute for Immunity & Transplantation at University College London. She has a longstanding interest in immune regulation with a particular focus on how costimulatory pathways set T cell activation thresholds. Lucy received a Wellcome Trust International Prize Travelling Fellowship to train in Prof Abul Abbas's group at UCSF before returning to the UK supported by a series of Career Development and Senior Fellowships from the Medical Research Council. Her group uses both mouse models and patient samples with the aim of understanding regulatory mechanisms in autoimmunity, with particular focus on Type 1 Diabetes. Lucy's work led to the discovery that regulatory T cells (Tregs) are not anergic in vivo, but instead proliferate in response to self or foreign antigens. She went on to show that Tregs can use the inhibitory protein CTLA-4 to elicit suppressive function, via an unusual mechanism involving the capture and degradation of costimulatory ligands, and that Tregs from patients with CTLA-4 mutations show impaired function. Her interest in T cell / B cell collaboration led to the early demonstration that CD28 costimulation is required for the development of follicular helper T cells and subsequent work has identified a key role for CTLA-4 in regulating this population. Lucy has served as Panel Chair for several funding bodies including the MRC, the Wellcome Trust and NC3Rs. She was selected for the UK *Innovators in Diabetes* programme in 2011, received a Royal Society Wolfson Research Merit Award in 2015 and an EFIS Lecture Award in 2016.