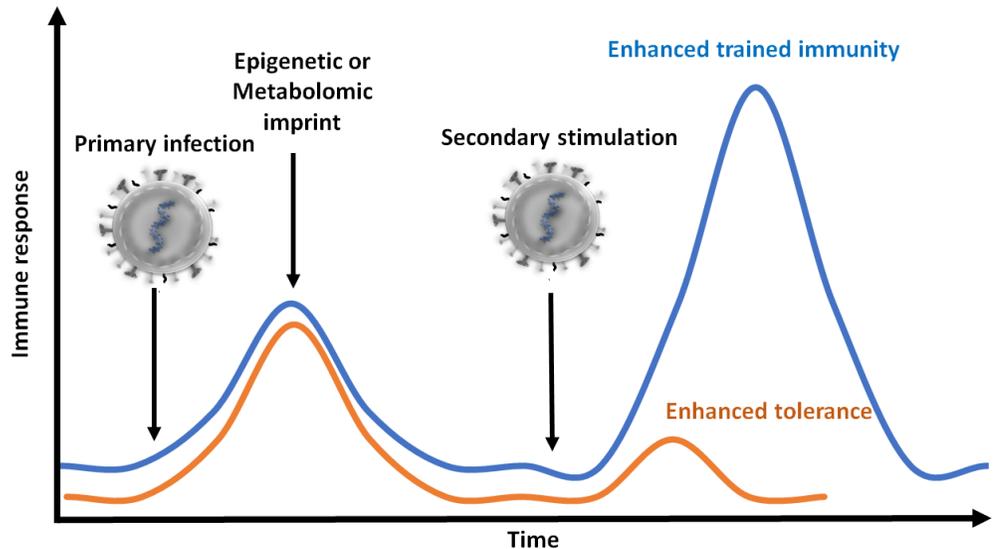


Schwarze Group

Mechanisms and consequences of respiratory mucosal priming prior to and following respiratory syncytial virus infection

Respiratory syncytial virus (RSV) infection is the main cause of viral pneumonia in young children and bronchiolitis in infants and confers an increased risk of subsequent pre-school wheeze and childhood asthma.

Utilising in vivo models and air-liquid interface cultures, we investigate long-term effects of RSV infection on airway epithelial cells to determine if they undergo immune training.



Concurrent infections can modulate the immune system and RSV immunity. In mice, a gut helminth infection (*H. polygyrus*) greatly reduces viral load in subsequent RSV infection in a type-I interferon and microbiome dependent manner. We investigate the mechanisms of this anti-viral effect, in particular the role of helminth-induced monocytes and their recruitment to the lung.

