

巴斯德讲坛-资深系列 Pasteur Colloquium-Senior

Novel immune regulatory mechanisms in respiratory syncytial virus infection in humans



[Speaker]

[Time]

[Host]

[Venue]

Richard Lo-Man, Research Director

10:00-11:30AM, September 4, 2017

Prof. Xiaoming Zhang

A0201, Life Science Research Building

[Speaker Introduction]

2009- present
Research Director, Institut Pasteur, Paris, France

2000-2008 Assistant Professor, Institut Pasteur, Paris, France

1997-1999 Research Assistant, Institut Pasteur, Paris, France

[Abstract]

Early life is associated with increased susceptibility to infection, which is in part due to an ineffective immune system. Immune regulatory and effector mechanisms ensure that vital functions and organ development are priviledged over unwanted tissue damages. Respiratory syncytial virus (RSV) is responsible for life-threatening infections in newborns and infants, whereas it leads to mild, asymptomatic or no disease in older individuals. Excessive T_H2 cell-related inflammation is a hallmark of many pathologies in early infancy from RSV-associated disease to allergy. We identified a number of age-dependent immune parameters at molecular and cellular levels contributes to this early life immunological unfitness and represents risk factors as well as biomarkers of the disease. I will discuss recent findings about regulatory B cells, dendritic cells and innate lymphoid cells that impact RSV clearance and immunopathology in the human newborn.



