Bystander and antigen-specific T-B interactions

Hai Qi

Institute for Immunology, School of Medicine, Tsinghua University, Beijing, 100084, China

The germinal center (GC) reaction gives rise to affinity-matured, long-lived plasma cells and memory B cells. GC formation, maintenance and affinity selection critically depend on follicular T helper (Tfh) cells and their interactions with B cells in both the classical antigen-specific manner and the newly identified bystander mode. In this talk, I will discuss published and unpublished results that reveal how B7-family costimulatory molecule ICOS and co-inhibitory molecule PD-1 control both types of interactions to optimize the GC response.