

**08 Dec 2025****12-1pm****MD4-02-03E - MD4  
Microbiology, Seminar  
room, level 2****Prof Zhang Jing-ren**

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## **Cellular and molecular basis of blood sterility**

### **Abstract**

The sterility of the blood circulation is essential for human health, but the cellular and molecular basis for microbial recognition and capture has remained largely unclear. Recent studies have uncovered that the resident macrophages in the liver (Kupffer cells) and spleen (red pulp macrophages) are responsible for capturing and killing blood-borne bacteria. This sterilizing immunity requires the initial recognition of invading bacteria by pattern-recognition receptors.

