Memory NK cells during mousepox infection

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Although traditionally classified as cells of the innate system, recent studies have shown the NK cells generate antigen-specific memory during viral infection or vaccination, and protect against subsequent viral infections. We recently discovered that CD94-NKG2E, another NK cell activating receptor, recognize ectromelia virus infected cells in the context of the non-classical MHC class I molecule Qa-1b. We want to detect anti-ECTV specific NK cell memory during viral infection. In the long term, we also want to explore the molecular and cellular mechanisms involved in the generation and maintenance of NK cell memory, relevant to development of vaccination strategies.

Biography

Professor Min Fang got her PhD from the Institute of Genetics and Developmental Biology, CAS in 2003. She had been worked in Fox Chase Cancer Center in USA as a postdoc associate, research associate and staff scientist before she joined the Institute of Microbiology, CAS in June, 2012 as a professor supported by “Thousand Young Talents Program” of the China’s government. Her work has focused on studying the pathogenesis of viral infection using ectromelia virus as a model, as well as the mechanisms by which vaccines afford protection. In this work she has uncovered important mechanistic insights into natural and acquired resistance to an acute viral disease. Her work was published in esteemed journals such as: Immunity, J Exp Med, PNAS, Plos Pathogen, etc, and many works were selected and referred by the “Faculty of 1000”.

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