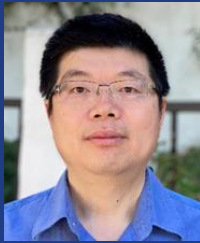


# SigN VIRTUAL SEMINAR



## XIE Jianming

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### Engineering immune cells to recognize HLA-DR loss in hematologic malignancies

Chimeric antigen receptor (CAR)-engineered T cells and NK cells have remarkable cytotoxicity against hematologic malignancies; however, they may also attack normal cells sharing the target antigen. Since human leukocyte antigen DR (HLA-DR) is lost or downregulated in a substantial proportion of hematologic malignancies, presumably a mechanism to escape immune surveillance, we hypothesize that the anti-cancer specificity of CAR-T/NK cells can be enhanced by activating them against cancer antigens while inhibiting them against HLA-DR. In this talk, I will introduce our recent work on developing an inhibitory CAR (iCAR) that can enable NK cells and T cells to “recognize” the absence of HLA-DR on blood cancer cells. I will also discuss the prospects of using the same strategy to target many solid tumors.



**14<sup>th</sup> July 2022 (Thursday)**

**10AM – 11AM (Singapore Time)**

Join Zoom: [LINK](#) or Scan QR Code

Meeting ID: 920 4694 4991

Passcode: 609160



*Seminar is  
open for all  
to attend.*

*Registration  
not  
required.*

