



ON-SITE BIOLOGY COLLOQUIUM

Friday, 12 Apr 2024 | 4 pm | DBS Conference Room 1

Hosted by Emeritus Prof Wong Sek Man

Map to Block S3



Host Defense Networks against Insect-Borne Pathogens and pathogens fighting back



By **Jian YE**

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About the Speaker

Jian YE got his first degree in 2000 in Zhejiang University in China. After got Ph.D degree in Genetics from Chinese Academy of Sciences in Beijing China, he moved to Singapore in 2007 to take up a Postdoc fellowship working under supervision of Prof. Nam-Hai Chua in Temasek Life Science Laboratory. He has been leading a group working on the Strategic Research Program (SRP) and shortly after as a Principal Investigator in TLL. He is currently a department director in the Institute of Microbiology, Chinese Academy of Sciences, Beijing, China. Dr. Ye Jian is one of Recipients of Excellent Young Scientists Fund in China in areas of Host immunity against Insect-borne pathogens.

Upon infection with insect-borne microbial pathogens, hosts are exposed to two types of damage simultaneously. Over the past decade, numerous molecular studies have been conducted to understand how hosts respond to pathogens or herbivores. However, investigations of host responses typically focus on a single stress and are performed under static laboratory conditions. In this talk, I will present our recent research which sheds light on how plants deploy broad-spectrum mechanisms against both vector-borne pathogens and insect vectors. Both virus and Bacteria have evolved to fight Back. I will also give our new understandings on how pathogens target and subvert the host innate immune System to successful infection.