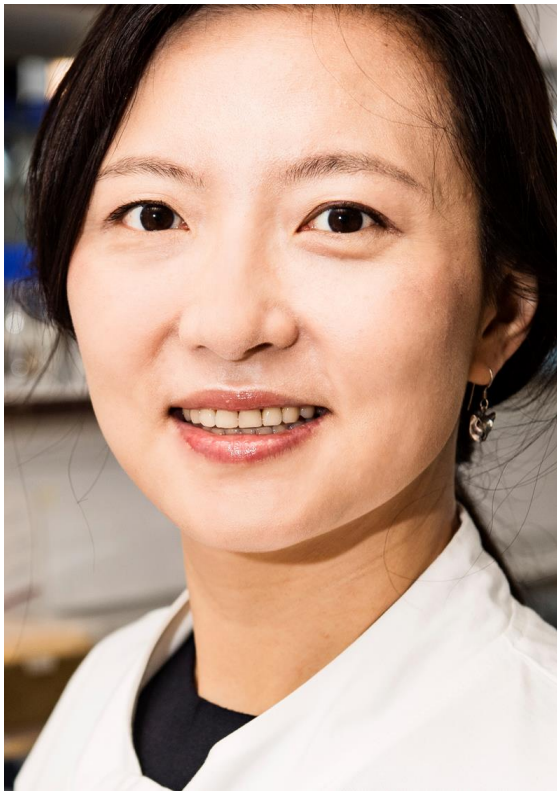


SEMINAR

Mon 18 Mar 2019 | **10am** | DBS Conference Room 1

Hosted by A/P Xu Jian

# Epigenetic reprogramming in plant germlines



**By Feng Xiaoqi**

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EMBO Young Investigator 2018

Germ cells are “immortal” as they can be indefinitely transmitted through generations. Establishment of germ cell immortality and identity requires extensive reprogramming of the chromatin state. Understanding this epigenetic reprogramming is crucial for the elucidation of germline biology. Conversely, germlines are essential for understanding epigenetics because they mediate inheritance and undergo large-scale epigenetic changes.

Dr. Feng Xiaoqi's lab established the Arabidopsis male germline – composed of four cell types produced by three sequential cell divisions – as a model system, and developed advanced techniques for cell isolation and epigenomic analysis. The ability to examine each germline cell type, combined with the high tolerance of Arabidopsis for epigenetic disruption, allows precise and powerful genetic analysis. Using this unique system, her lab aims to elucidate the scope, mechanism and biological significance of plant germline epigenetic reprogramming.