**Research Theme:** Epigenetics, Genetics, Genomics and Cell Biology  

**Research Project Title:** Identify and Study the Molecular Factors Regulating X Chromosome Inactivation  

**Principal Investigator/Supervisor:** Asst/Prof Zhang Li-Feng  

**Co-supervisor/ Collaborator(s) (if any):** NA  

**Project Description**

**a) Background**

In mammals, one of the two female X chromosomes is transcriptionally inactivated to compensate the dosage difference of X-linked genes between male and female. This phenomenon, called X chromosome inactivation, is an developmental event occurring in early embryos. XCI is related with a handful of interesting topics in the current research, such as epigenetic regulation, long non-coding RNAs, chromatin modifications, iPS cells and embryonic stem cell pluripotency.

**b) Proposed work**

Projects are available to use a plethora of cutting-edge molecular and cell biology methods to identify and investigate the molecular components involved in X chromosome inactivation.

**Supervisor contact:**  
If you have questions regarding this project, please email the Principal Investigator:  
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Please apply at the following:  
[Application Link](http://admissions.ntu.edu.sg/graduate/R-Programs/R-WhenYouApply/Pages/R-ApplyOnline.aspx)