NANYANG TECHNOLOGICAL UNIVERSITY

School of Biological Sciences

Reg. No. 200604393R

Research Theme:
Research Project Title: **Understanding off-target effects of CRISPR/Cas9 using molecular dynamics simulations**
Principal Investigator/Supervisor: **A/Prof Mu Yuguang**
Co-supervisor/ Collaborator(s) (if any): **NA**
Project Description CRISPR-Cas9, a powerful genome editing tool, has widely been applied in biological fields. Since the discovery of CRISPR-Cas9 as an adaptive immune system, it has been gradually modified to perform precise genome editing in eukaryotic cells by creating double-strand breaks. Although it is robust and efficient, the current CRISPR-Cas9 system faces a major flaw: off-target effects, which are not well understood. In this project, molecular dynamics simulations will be applied to study the off-target effects.
Supervisor contact: **If you have questions regarding this project, please email the Principal Investigator: ygmu@ntu.edu.sg**
SBS contact and how to apply: Associate Chair-Biological Sciences (Graduate Studies) : AC-SBS-GS@ntu.edu.sg Please apply at the following: http://admissions.ntu.edu.sg/graduate/R-Programs/R-WhenYouApply/Pages/R-ApplyOnline.aspx

60 Nanyang Drive, Singapore 637551
Tel: +65 6316 2800, Fax: +65 6791 3856
Website: http://www.sbs.ntu.edu.sg/Pages/Home.aspx