NANYANG TECHNOLOGICAL UNIVERSITY SINGAPORE

School of Biological Sciences
College of Science

Reg. No. 200604393R

**Research Theme:** **Cell Biology/Biochemistry**

**PhD Research Project Title:** **How does the organelle contact site contribute to membrane remodeling?**

**Scholarship category (Please indicate the type of scholarship for this project):**

**(a) SBS Research Student Scholarship (for SBS faculty only)**

**Principal Investigator/Supervisor:** **Sho Suzuki**

**Co-supervisor/ Collaborator(s) (if any):** **No**

## Project Description

Eukaryotic cells compartmentalize biochemical reactions and cell signaling events in membrane-bound organelles. These organelles actively communicate with each other at the membrane-contact sites (MCSs). To facilitate this, membrane remodeling occurs at the MCSs remains unclear. Recently, I discovered an unexpected contribution of MCS to endosomal sorting. Excitingly, these observations provide new mechanisms for the understanding of membrane dynamics at the MCSs. The PhD candidate will utilize cell biological and biochemical approaches mainly using yeast cells to study how organelle contact sites contribute to membrane remodeling. Loss-of-function mutations of genes encoding the MCS resident proteins are directly linked to neurological disorders, including Parkinson's disease. This research program is uniquely positioned toward new mechanisms underlying neurodegenerative diseases.

## Supervisor contact:

**If you have questions regarding this project, please email the Principal Investigator:**

## SBS contact and how to apply:

Associate Chair-Biological Sciences (Graduate Studies) : AC-SBS-GS@ntu.edu.sg

Please apply at the following:

**Application portal:**

https://venus.wis.ntu.edu.sg/GOAL/OnlineApplicationModule/frmOnlineApplication.ASPX